

Digital Transistors (BRT)

R1 = 4.7 kΩ, R2 = 4.7 kΩ

NPN Transistors with Monolithic Bias Resistor Network

MUN2232, MMUN2232L, MUN5232, DTC143EE, DTC143EM3, NSBC143EF3

This series of digital transistors is designed to replace a single device and its external resistor bias network. The Bias Resistor Transistor (BRT) contains a single transistor with a monolithic bias network consisting of two resistors; a series base resistor and a base-emitter resistor. The BRT eliminates these individual components by integrating them into a single device. The use of a BRT can reduce both system cost and board space.

Features

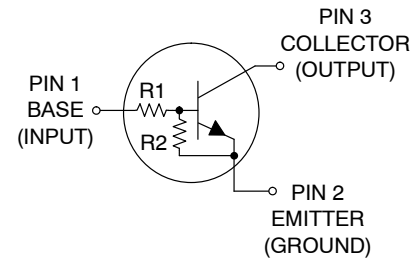
- Simplifies Circuit Design
- Reduces Board Space
- Reduces Component Count
- S and NSV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

MAXIMUM RATINGS (T_A = 25 °C)

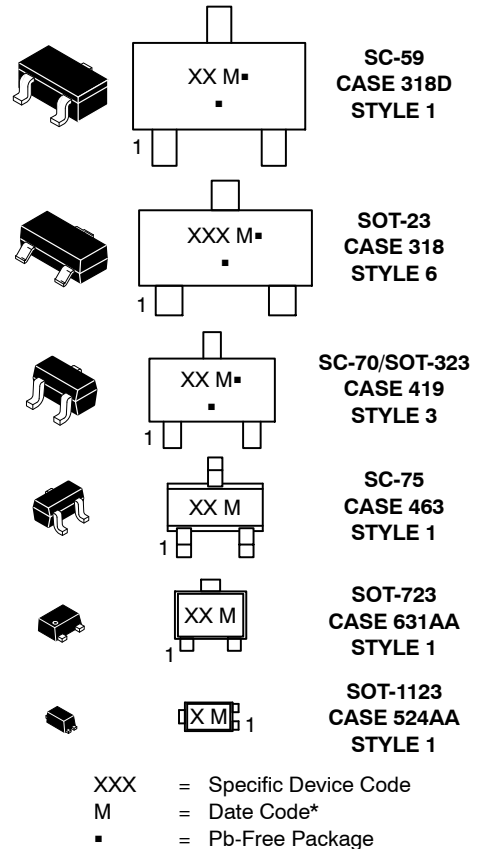
Symbol	Rating	Max	Unit
V _{CBO}	Collector-Base Voltage	50	Vdc
V _{CEO}	Collector-Emitter Voltage	50	Vdc
I _C	Collector Current-Continuous	100	mAdc
V _{IN(fwd)}	Input Forward Voltage	30	Vdc
V _{IN(rev)}	Input Reverse Voltage	10	Vdc

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

PIN CONNECTIONS



MARKING DIAGRAMS



(Note: Microdot may be in either location)

* Date Code orientation may vary depending upon manufacturing location.

ORDERING INFORMATION

See detailed ordering, marking, and shipping information on page 6 of this data sheet.

NOTE: Some of the devices on this data sheet have been **DISCONTINUED**. Please refer to the table on page 6.

Table 1. THERMAL CHARACTERISTICS

Symbol	Characteristic	Max	Unit
THERMAL CHARACTERISTICS (SC-59) (MUN2232)			
P _D	Total Device Dissipation T _A = 25 °C	(Note 1) 230	mW
	Derate above 25 °C	(Note 2) 338 (Note 1) 1.8 (Note 2) 2.7	mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	(Note 1) 540 (Note 2) 370	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead	(Note 1) 264 (Note 2) 287	°C/W
T _J , T _{stg}	Junction and Storage Temperature Range	-55 to +150	°C
THERMAL CHARACTERISTICS (SOT-23) (MMUN2232L)			
P _D	Total Device Dissipation T _A = 25 °C	(Note 1) 246	mW
	Derate above 25 °C	(Note 2) 400 (Note 1) 2.0 (Note 2) 3.2	mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	(Note 1) 508 (Note 2) 311	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead	(Note 1) 174 (Note 2) 208	°C/W
T _J , T _{stg}	Junction and Storage Temperature Range	-55 to +150	°C
THERMAL CHARACTERISTICS (SC-70/SOT-323) (MUN5232)			
P _D	Total Device Dissipation T _A = 25 °C	(Note 1) 202	mW
	Derate above 25 °C	(Note 2) 310 (Note 1) 1.6 (Note 2) 2.5	mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	(Note 1) 618 (Note 2) 403	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead	(Note 1) 280 (Note 2) 332	°C/W
T _J , T _{stg}	Junction and Storage Temperature Range	-55 to +150	°C
THERMAL CHARACTERISTICS (SC-75) (DTC143EE)			
P _D	Total Device Dissipation T _A = 25 °C	(Note 1) 200	mW
	Derate above 25 °C	(Note 2) 300 (Note 1) 1.6 (Note 2) 2.4	mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	(Note 1) 600 (Note 2) 400	°C/W
T _J , T _{stg}	Junction and Storage Temperature Range	-55 to +150	°C
THERMAL CHARACTERISTICS (SOT-723) (DTC143EM3)			
P _D	Total Device Dissipation T _A = 25 °C	(Note 1) 260	mW
	Derate above 25 °C	(Note 2) 600 (Note 1) 2.0 (Note 2) 4.8	mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	(Note 1) 480 (Note 2) 205	°C/W
T _J , T _{stg}	Junction and Storage Temperature Range	-55 to +150	°C
THERMAL CHARACTERISTICS (SOT-1123) (NSBC143EF3)			
P _D	Total Device Dissipation T _A = 25 °C	(Note 3) 254	mW
	Derate above 25 °C	(Note 4) 297 (Note 3) 2.0 (Note 4) 2.4	mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	(Note 3) 493 (Note 4) 421	°C/W

Table 1. THERMAL CHARACTERISTICS

Symbol	Characteristic	Max	Unit
THERMAL CHARACTERISTICS (SOT-1123) (NSBC143EF3)			
$R_{\theta JL}$	Thermal Resistance, Junction to Lead (Note 3)	193	°C/W
T_J, T_{stg}	Junction and Storage Temperature Range	-55 to +150	°C

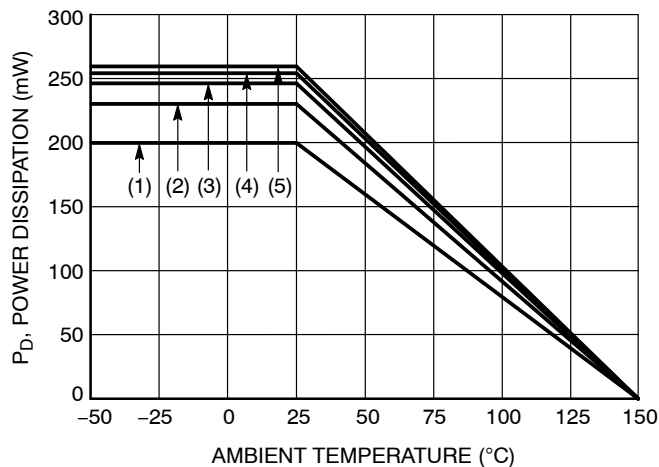
1. FR-4 @ Minimum Pad.
2. FR-4 @ 1.0 x 1.0 Inch Pad.
3. FR-4 @ 100 mm², 1 oz. copper traces, still air.
4. FR-4 @ 500 mm², 1 oz. copper traces, still air.

Table 2. ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$, unless otherwise noted)

Symbol	Characteristic	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
I_{CBO}	Collector-Base Cutoff Current ($V_{CB} = 50\text{ V}$, $I_E = 0$)			100	nAdc
I_{CEO}	Collector-Emitter Cutoff Current ($V_{CE} = 50\text{ V}$, $I_B = 0$)			500	nAdc
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB} = 6.0\text{ V}$, $I_C = 0$)			1.5	mAdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C = 10\text{ }\mu\text{A}$, $I_E = 0$)	50			Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (Note 5) ($I_C = 2.0\text{ mA}$, $I_B = 0$)	50			Vdc
ON CHARACTERISTICS					
h_{FE}	DC Current Gain (Note 5) ($I_C = 5.0\text{ mA}$, $V_{CE} = 10\text{ V}$)	15	30		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (Note 5) ($I_C = 10\text{ mA}$, $I_B = 1.0\text{ mA}$)			0.25	Vdc
$V_{i(off)}$	Input Voltage (off) ($V_{CE} = 5.0\text{ V}$, $I_C = 100\text{ }\mu\text{A}$)		1.2	0.5	Vdc
$V_{i(on)}$	Input Voltage (on) ($V_{CE} = 0.3\text{ V}$, $I_C = 20\text{ mA}$)	2.5	2.0		Vdc
V_{OL}	Output Voltage (on) ($V_{CC} = 5.0\text{ V}$, $V_B = 2.5\text{ V}$, $R_L = 1.0\text{ k}\Omega$)			0.2	Vdc
V_{OH}	Output Voltage (off) ($V_{CC} = 5.0\text{ V}$, $V_B = 0.25\text{ V}$, $R_L = 1.0\text{ k}\Omega$)	4.9			Vdc
R_1	Input Resistor	3.3	4.7	6.1	k Ω
R_1/R_2	Resistor Ratio	0.8	1.0	1.2	

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

5. Pulsed Condition: Pulse Width = 300 msec, Duty Cycle $\leq 2\%$.



- (1) SC-75 and SC-70/SOT323; Minimum Pad
- (2) SC-59; Minimum Pad
- (3) SOT-23; Minimum Pad
- (4) SOT-1123; 100 mm², 1 oz. copper trace
- (5) SOT-723; Minimum Pad

Figure 1. Derating Curve

TYPICAL CHARACTERISTICS
MUN2232, MMUN2232L, MUN5232, DTC143EE, DTC143EM3

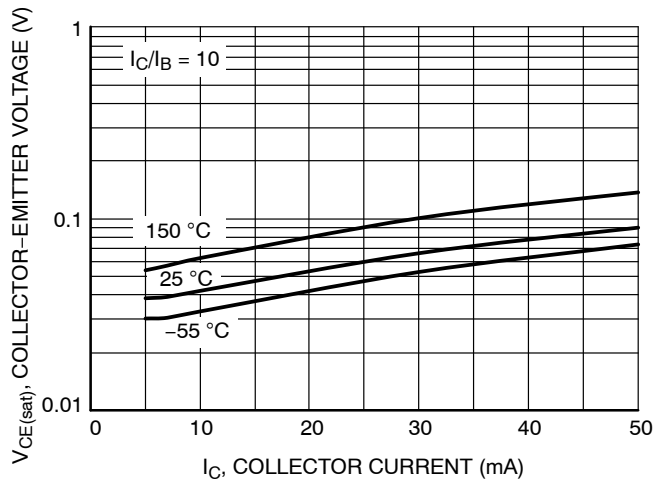


Figure 2. $V_{CE(sat)}$, vs. I_C

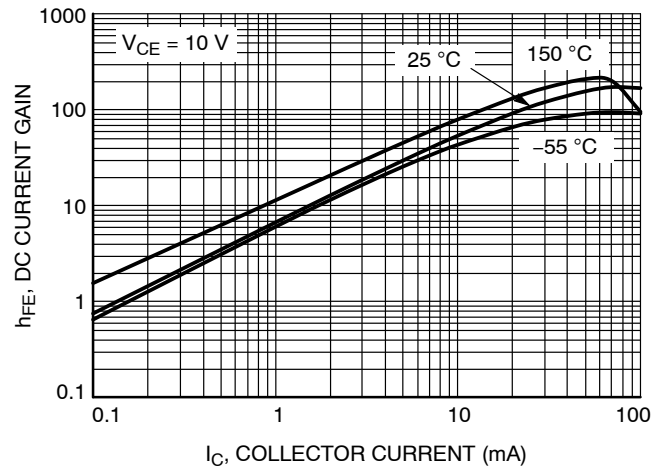


Figure 3. DC Current Gain

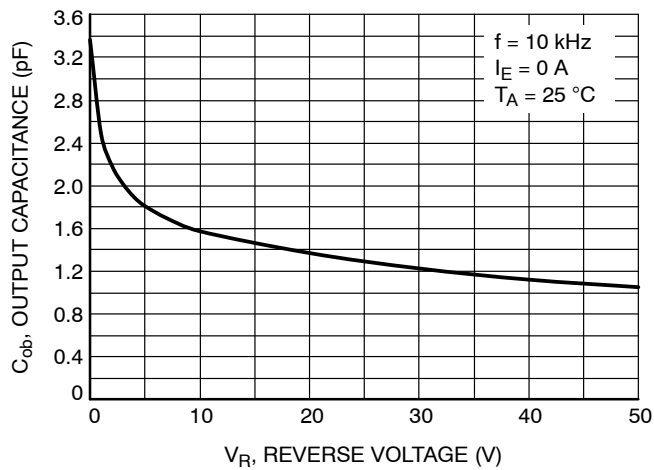


Figure 4. Output Capacitance

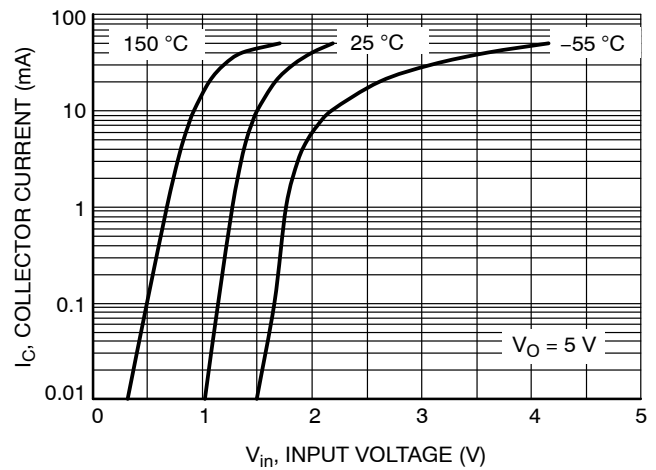


Figure 5. Output Current vs. Input Voltage

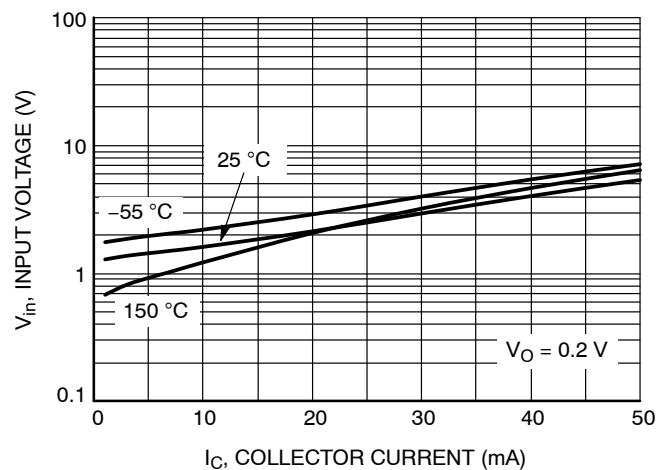


Figure 6. Input Voltage vs. Output Current

TYPICAL CHARACTERISTICS – NSBC143EF3

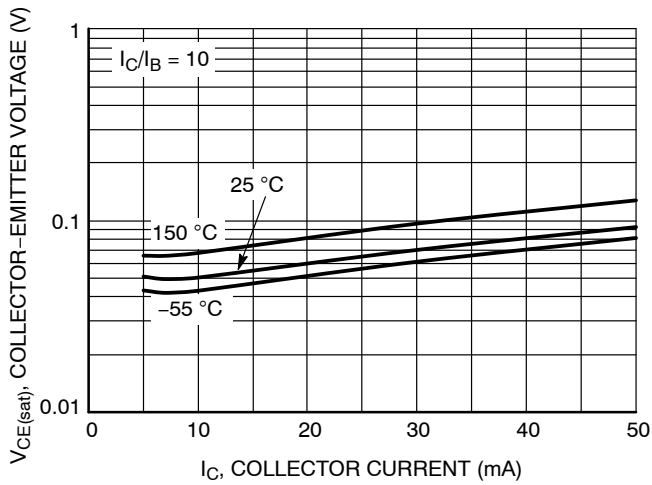
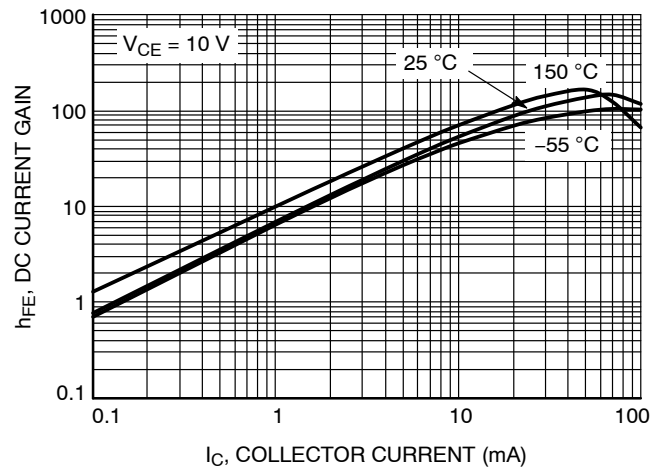

Figure 7. $V_{CE(sat)}$, vs. I_C


Figure 8. DC Current Gain

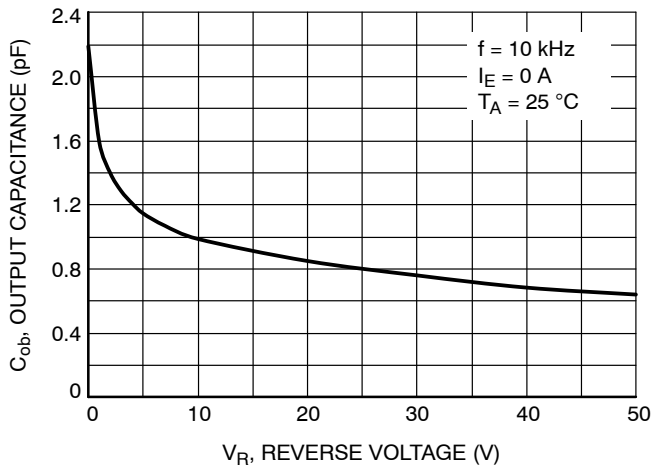


Figure 9. Output Capacitance

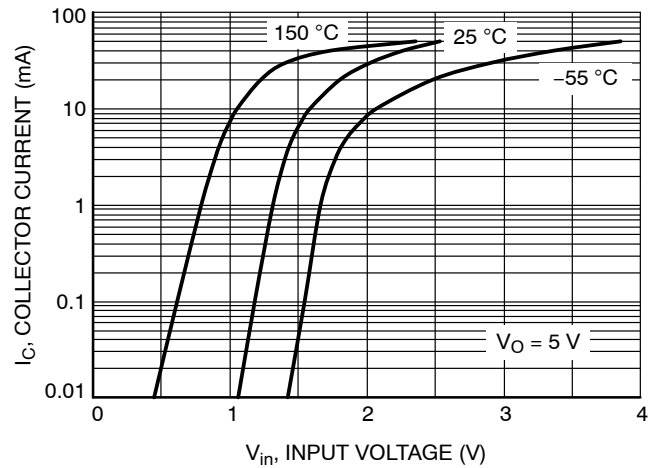


Figure 10. Output Current vs. Input Voltage

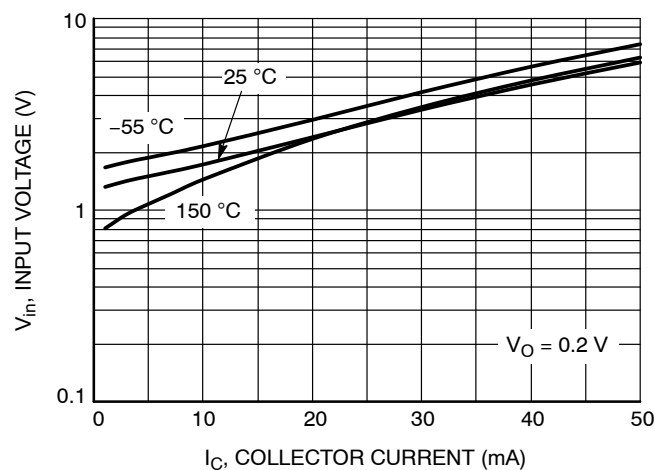


Figure 11. Input Voltage vs. Output Current

Table 3. ORDERING INFORMATION

Device	Part Marking	Package	Shipping [†]
MUN2232T1G, SMUN2232T1G*	8J	SC-59 (Pb-Free)	3000 / Tape & Reel
MMUN2232LT1G, MMUN2232LT1G-NC NSVMMUN2232LT1G* NSVMMUN2232LT1G-NC*	A8J	SOT-23 (Pb-Free)	3000 / Tape & Reel
NSVMMUN2232LT3G* NSVMMUN2232LT3G-NC*			10000 / Tape & Reel
MUN5232T1G MUN5232T1G-NC SMUN5232T1G* SMUN5232T1G-NC*	8J	SC-70/SOT-323 (Pb-Free)	3000 / Tape & Reel
DTC143EET1G DTC143EET1G-NC (Under Development)	8J	SC-75 (Pb-Free)	3000 / Tape & Reel
DTC143EM3T5G DTC143EM3T5G-NC (Under Development)	8J	SOT-723 (Pb-Free)	8000 / Tape & Reel

DISCONTINUED (Note 6)

NSBC143EF3T5G	P	SOT-1123 (Pb-Free)	8000 / Tape & Reel
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† For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, [BRD8011/D](#).

* S and NSV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

6. **DISCONTINUED:** This device is not available. Please contact your **onsemi** representative for information. The most current information on this device may be available on www.onsemi.com.

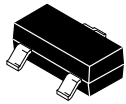


REVISION HISTORY

Revision	Description of Changes	Date
5	Adding OPN's device on ordering information table and update the datasheet to follow our latest formatting guidelines	10/8/2026

This document has undergone updates prior to the inclusion of this revision history table. The changes tracked here only reflect updates made on the noted approval dates.

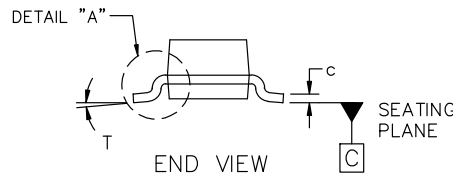
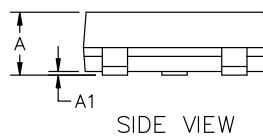
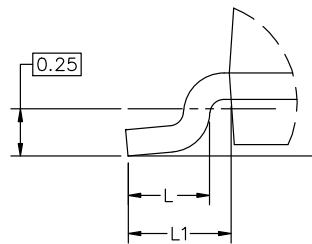
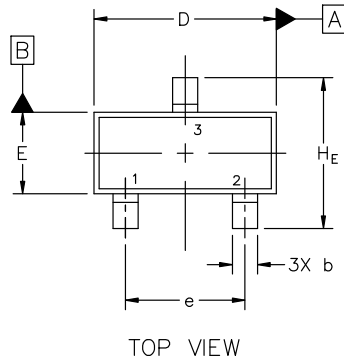




SCALE 4:1

SOT-23 (TO-236) 2.90x1.30x1.00 1.90P
CASE 318
ISSUE AU

DATE 14 AUG 2024

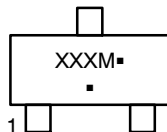


MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.89	1.00	1.11
A1	0.01	0.06	0.10
b	0.37	0.44	0.50
c	0.08	0.14	0.20
D	2.80	2.90	3.04
E	1.20	1.30	1.40
e	1.78	1.90	2.04
L	0.30	0.43	0.55
L1	0.35	0.54	0.69
HE	2.10	2.40	2.64
T	0°	---	10°

NOTES:

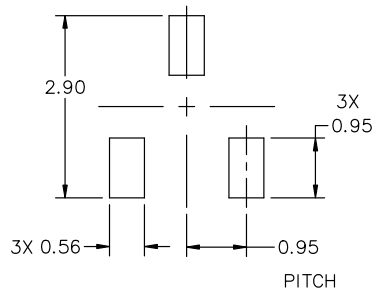
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2018.
2. CONTROLLING DIMENSIONS: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF THE BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.

GENERIC MARKING DIAGRAM*



XXX = Specific Device Code
M = Date Code
▪ = Pb-Free Package

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "▪", may or may not be present. Some products may not follow the Generic Marking.



RECOMMENDED MOUNTING FOOTPRINT

* For additional information on our Pb-Free strategy and soldering details, please download the onsemi Soldering and Mounting Techniques Reference Manual, SOLDERM/D.

STYLES ON PAGE 2

DOCUMENT NUMBER:	98ASB42226B	Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.
DESCRIPTION:	SOT-23 (TO-236) 2.90x1.30x1.00 1.90P	PAGE 1 OF 2

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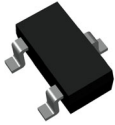
SOT-23 (TO-236) 2.90x1.30x1.00 1.90P
CASE 318
ISSUE AU

DATE 14 AUG 2024

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STYLE 9: PIN 1. ANODE 2. ANODE 3. CATHODE	STYLE 10: PIN 1. DRAIN 2. SOURCE 3. GATE	STYLE 11: PIN 1. ANODE 2. CATHODE 3. CATHODE-ANODE	STYLE 12: PIN 1. CATHODE 2. CATHODE 3. ANODE	STYLE 13: PIN 1. SOURCE 2. DRAIN 3. GATE	STYLE 14: PIN 1. CATHODE 2. GATE 3. ANODE
STYLE 15: PIN 1. GATE 2. CATHODE 3. ANODE	STYLE 16: PIN 1. ANODE 2. CATHODE 3. CATHODE	STYLE 17: PIN 1. NO CONNECTION 2. ANODE 3. CATHODE	STYLE 18: PIN 1. NO CONNECTION 2. CATHODE 3. ANODE	STYLE 19: PIN 1. CATHODE 2. ANODE 3. CATHODE-ANODE	STYLE 20: PIN 1. CATHODE 2. ANODE 3. GATE
STYLE 21: PIN 1. GATE 2. SOURCE 3. DRAIN	STYLE 22: PIN 1. RETURN 2. OUTPUT 3. INPUT	STYLE 23: PIN 1. ANODE 2. ANODE 3. CATHODE	STYLE 24: PIN 1. GATE 2. DRAIN 3. SOURCE	STYLE 25: PIN 1. ANODE 2. CATHODE 3. GATE	STYLE 26: PIN 1. CATHODE 2. ANODE 3. NO CONNECTION
STYLE 27: PIN 1. CATHODE 2. CATHODE 3. CATHODE	STYLE 28: PIN 1. ANODE 2. ANODE 3. ANODE				

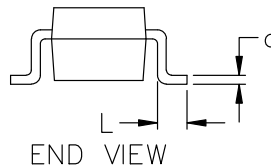
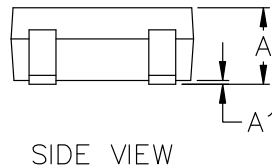
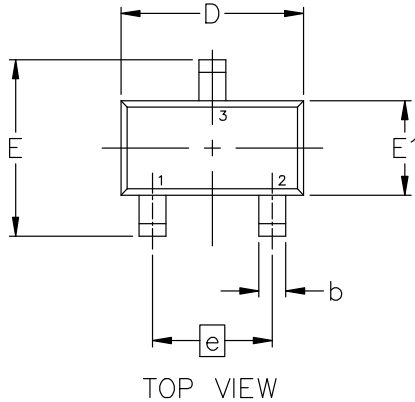
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DESCRIPTION:	SOT-23 (TO-236) 2.90x1.30x1.00 1.90P	PAGE 2 OF 2

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SC-59-3 2.90x1.50x1.15, 1.90P
CASE 318D
ISSUE J

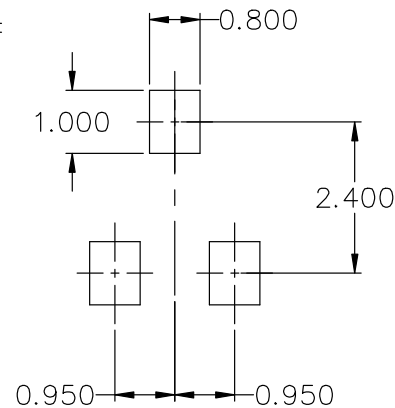
DATE 15 FEB 2024



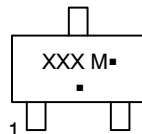
NOTES:

1. DIMENSIONING AND TOLERANCING CONFORM TO ASME Y14.5-2018.
2. ALL DIMENSION ARE IN MILLIMETERS.

DIM	MILLIMETERS		
	MIN.	NOM.	MAX.
A	1.00	1.15	1.30
A1	0.01	0.06	0.10
b	0.35	0.43	0.50
c	0.09	0.14	0.18
D	2.70	2.90	3.10
E	2.50	2.80	3.00
E1	1.30	1.50	1.70
e	1.90 BSC		
L	0.20	0.40	0.60



GENERIC MARKING DIAGRAM*



XXX = Specific Device Code
M = Date Code
▪ = Pb-Free Package*

(*Note: Microdot may be in either location)

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "▪", may or may not be present. Some products may not follow the Generic Marking.

* FOR ADDITIONAL INFORMATION ON OUR Pb-FREE STRATEGY AND SOLDERING DETAILS, PLEASE DOWNLOAD THE ON SEMICONDUCTOR SOLDERING AND MOUNTING TECHNIQUES REFERENCE MANUAL, SOLDERRM/D.

STYLE 1:
PIN 1. BASE
2. EMITTER
3. COLLECTOR

STYLE 2:
PIN 1. ANODE
2. N.C.
3. CATHODE

STYLE 3:
PIN 1. ANODE
2. ANODE
3. CATHODE

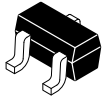
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PIN 1. CATHODE
2. N.C.
3. ANODE

STYLE 5:
PIN 1. CATHODE
2. CATHODE
3. ANODE

STYLE 6:
PIN 1. ANODE
2. CATHODE
3. ANODE/CATHODE

DOCUMENT NUMBER:	98ASB42664B	Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.
DESCRIPTION:	SC-59-3 2.90x1.50x1.15, 1.90P	PAGE 1 OF 1

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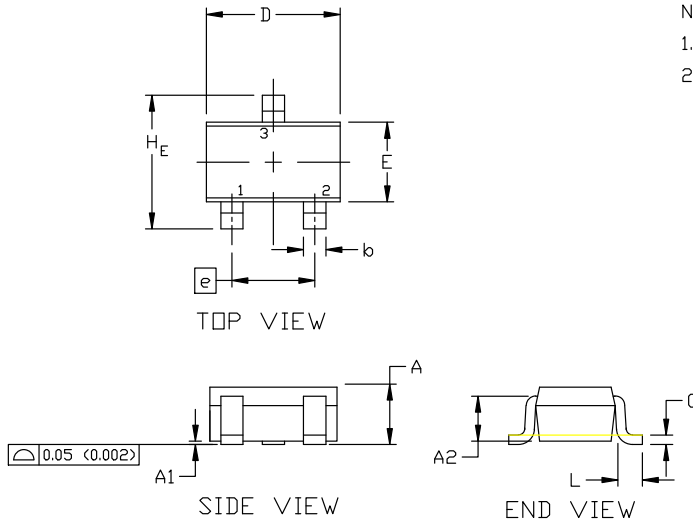
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SC-70 (SOT-323)
CASE 419
ISSUE R

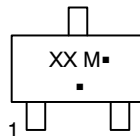
DATE 11 OCT 2022

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH

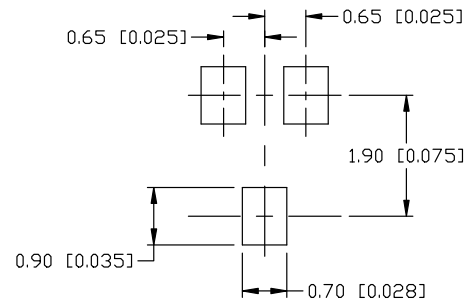


DIM	MILLIMETERS			INCHES		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	0.80	0.90	1.00	0.032	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A2	0.70 REF			0.028 BSC		
b	0.30	0.35	0.40	0.012	0.014	0.016
c	0.10	0.18	0.25	0.004	0.007	0.010
D	1.80	2.00	2.20	0.071	0.080	0.087
E	1.15	1.24	1.35	0.045	0.049	0.053
e	1.20	1.30	1.40	0.047	0.051	0.055
e1	0.65 BSC			0.026 BSC		
L	0.20	0.38	0.56	0.008	0.015	0.022
H_E	2.00	2.10	2.40	0.079	0.083	0.095

**GENERIC
MARKING DIAGRAM**


XX = Specific Device Code
M = Date Code
■ = Pb-Free Package

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "■", may or may not be present. Some products may not follow the Generic Marking.



* For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

SOLDERING FOOTPRINT

STYLE 1:
CANCELLED

STYLE 2:
PIN 1. ANODE
2. N.C.
3. CATHODE

STYLE 3:
PIN 1. BASE
2. EMITTER
3. COLLECTOR

STYLE 4:
PIN 1. CATHODE
2. CATHODE
3. ANODE

STYLE 5:
PIN 1. ANODE
2. ANODE
3. CATHODE

STYLE 6:
PIN 1. EMITTER
2. BASE
3. COLLECTOR

STYLE 7:
PIN 1. BASE
2. EMITTER
3. COLLECTOR

STYLE 8:
PIN 1. GATE
2. SOURCE
3. DRAIN

STYLE 9:
PIN 1. ANODE
2. CATHODE
3. CATHODE-ANODE

STYLE 10:
PIN 1. CATHODE
2. ANODE
3. ANODE-CATHODE

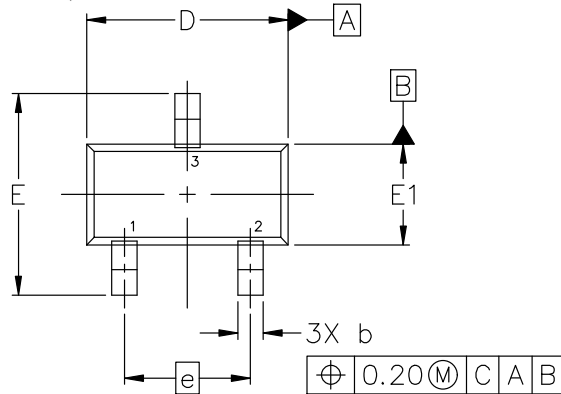
STYLE 11:
PIN 1. CATHODE
2. CATHODE
3. CATHODE

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DESCRIPTION:	SC-70 (SOT-323)	PAGE 1 OF 1

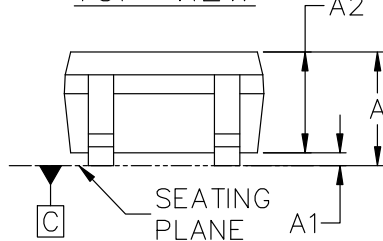
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SC75-3 1.60x0.80x0.80, 1.00P
CASE 463
ISSUE H

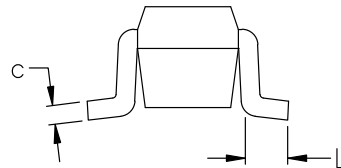
DATE 01 FEB 2024



TOP VIEW

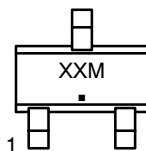


SIDE VIEW



END VIEW

GENERIC
MARKING DIAGRAM*



XX = Specific Device Code
M = Date Code
▪ = Pb-Free Package

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "▪", may or may not be present. Some products may not follow the Generic Marking.

STYLE 1:
PIN 1. BASE
2. EMITTER
3. COLLECTOR

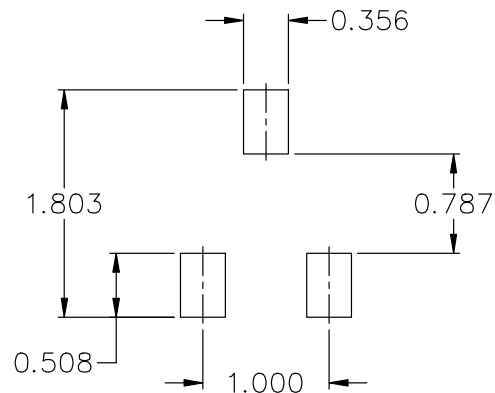
STYLE 2:
PIN 1. ANODE
2. N/C
3. CATHODE

STYLE 3:
PIN 1. ANODE
2. ANODE
3. CATHODE

STYLE 4:
PIN 1. CATHODE
2. CATHODE
3. ANODE

STYLE 5:
PIN 1. GATE
2. SOURCE
3. DRAIN

DIM	MILLIMETERS		
	MIN.	NOM.	MAX.
A	0.70	0.80	0.90
A1	0.00	0.05	0.10
A2	0.80 REF.		
b	0.15	0.20	0.30
c	0.10	0.15	0.25
D	1.55	1.60	1.65
E	1.50	1.60	1.70
E1	0.70	0.80	0.90
e	1.00 BSC		
L	0.10	0.15	0.20

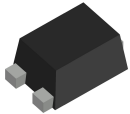


RECOMMENDED MOUNTING FOOTPRINT*

* FOR ADDITIONAL INFORMATION ON OUR Pb-FREE STRATEGY AND SOLDERING DETAILS, PLEASE DOWNLOAD THE ON SEMICONDUCTOR SOLDERING AND MOUNTING TECHNIQUES REFERENCE MANUAL, SOLDERRM/D.

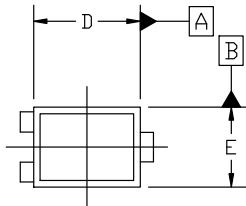
DOCUMENT NUMBER:	98ASB15184C	Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.
DESCRIPTION:	SC75-3 1.60x0.80x0.80, 1.00P	PAGE 1 OF 1

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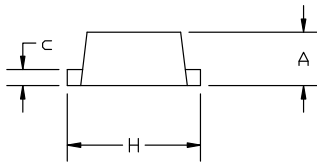


SOT-1123 0.80x0.60x0.37, 0.35P
CASE 524AA
ISSUE D

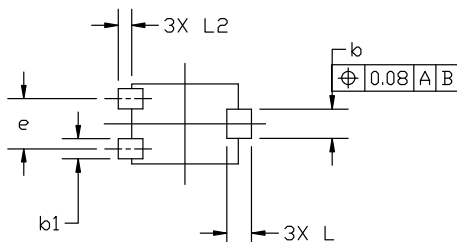
DATE 18 JAN 2024



TOP VIEW

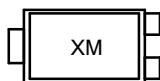


SIDE VIEW



BOTTOM VIEW

**GENERIC
MARKING DIAGRAM***



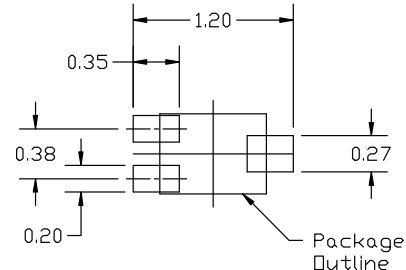
X = Specific Device Code
M = Date Code

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "•", may or may not be present. Some products may not follow the Generic Marking.

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2018.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.

MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.34	0.37	0.40
b	0.15	0.22	0.28
b1	0.10	0.15	0.20
c	0.07	0.12	0.17
D	0.75	0.80	0.85
E	0.55	0.60	0.65
e	0.35	0.38	0.40
H	0.950	1.000	1.050
L	0.185 REF		
L2	0.05	0.10	0.15



**RECOMMENDED
MOUNTING FOOTPRINT**

*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference manual, SOLDERM/D.

STYLE 1:
PIN 1. BASE
2. EMITTER
3. COLLECTOR

STYLE 2:
PIN 1. ANODE
2. N/C
3. CATHODE

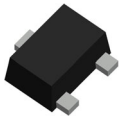
STYLE 3:
PIN 1. ANODE
2. ANODE
3. CATHODE

STYLE 4:
PIN 1. CATHODE
2. CATHODE
3. ANODE

STYLE 5:
PIN 1. GATE
2. SOURCE
3. DRAIN

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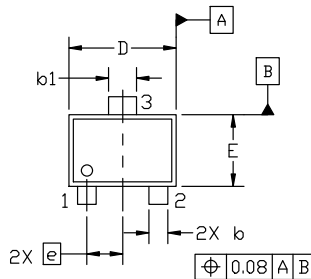


SOT-723 1.20x0.80x0.50, 0.40P
CASE 631AA
ISSUE E

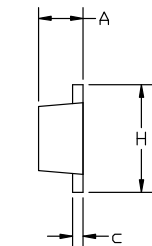
DATE 24 JAN 2024

NOTES:

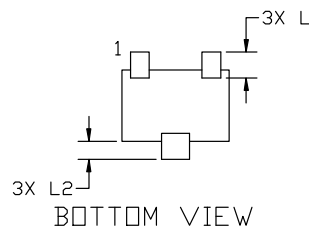
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2018.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



TOP VIEW

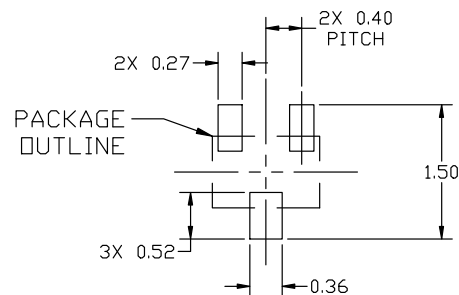


SIDE VIEW



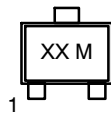
BOTTOM VIEW

DIM	MILLIMETERS		
	MIN.	NOM.	MAX.
A	0.45	0.50	0.55
b	0.15	0.21	0.27
b1	0.25	0.31	0.37
c	0.07	0.12	0.17
D	1.15	1.20	1.25
E	0.75	0.80	0.85
e	0.40 BSC		
H	1.15	1.20	1.25
L	0.29 REF		
L2	0.15	0.20	0.25



RECOMMENDED MOUNTING
FOOTPRINT

**GENERIC
MARKING DIAGRAM***



XX = Specific Device Code
M = Date Code

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "•", may or may not be present. Some products may not follow the Generic Marking.

*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERM/D.

STYLE 1: PIN 1. BASE 2. EMITTER 3. COLLECTOR	STYLE 2: PIN 1. ANODE 2. N/C 3. CATHODE	STYLE 3: PIN 1. ANODE 2. ANODE 3. CATHODE	STYLE 4: PIN 1. CATHODE 2. CATHODE 3. ANODE	STYLE 5: PIN 1. GATE 2. SOURCE 3. DRAIN
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DESCRIPTION:	SOT-723 1.20x0.80x0.50, 0.40P	PAGE 1 OF 1

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