

	V_{CE0}	50	Vdc
Collector Current – Continuous	I_C	100	mAdc

VV



MUN2132, MMUN2132L, MUN5132, DTA143EE, DTA143EM3, NSBA143EF3

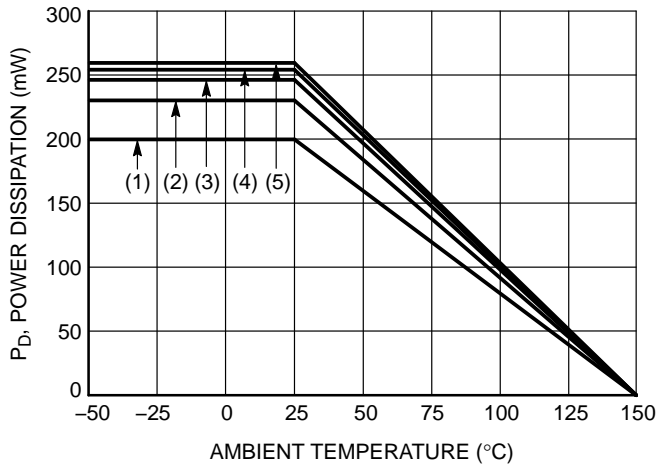
Table 1. ORDERING INFORMATION

Device	Part Marking	Package	Shipping†
MUN2132T1G, NSVMUN2132T1G*	6J	SC-59 (Pb-Free)	3000 / Tape & Reel
MMUN2132LT1G, NSVMMUN2132LT1G*	A6J	SOT-23 (Pb-Free)	3000 / Tape & Reel
MUN5132T1G, NSVMUN5132T1G*	6J	SC-70/SOT-323 (Pb-Free)	3000 / Tape & Reel
DTA143EET1G	43	SC-75 (Pb-Free)	3000 / Tape & Reel
DTA143EM3T5G, NSVDTA143EM3T5G*	6J	SOT-723 (Pb-Free)	8000 / Tape & Reel
NSBA143EF3T5G	A (90°)*	SOT-1123 (Pb-Free)	8000 / Tape & Reel

†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.

** (xx°) = Degree rotation in the clockwise direction.



- (1) SC-75 and SC-70/SOT-323; 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

MUN2132, MMUN2132L, MUN5132, DTA143EE, DTA143EM3, NSBA143EF3

Table 2. THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
THERMAL CHARACTERISTICS (SC-59) (MUN2132)			
Total Device Dissipation T _A = 25°C (Note 1) (Note 2)	P _D	230	mW
Derate above 25°C (Note 1) (Note 2)		338	mW/°C
Thermal Resistance, Junction to Ambient (Note 1) (Note 2)	R	1.8	
		2.7	

Table 2. THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
THERMAL CHARACTERISTICS (SOT-1123) (NSBA143EF3)			
Total Device Dissipation $T_A = 25^\circ\text{C}$ (Note 3) (Note 4) Derate above 25°C (Note 3) (Note 4)	P_D	254 297 2.0 2.4	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient (Note 3) (Note 4)	$R_{\theta JA}$	493 421	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction to Lead (Note 3)	$R_{\theta JL}$	193	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

TYPICAL CHARACTERISTICS
 MUN2132, MMUN2132L, MUN5132, DTA143EE, DTA143EM3

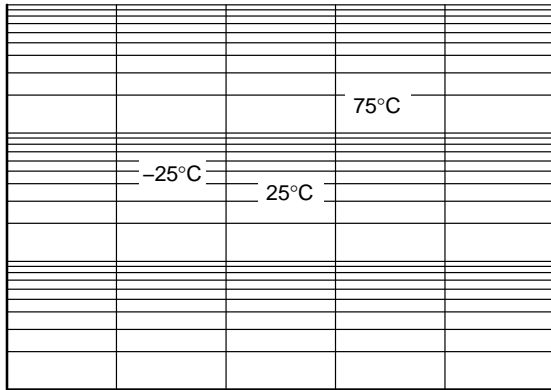
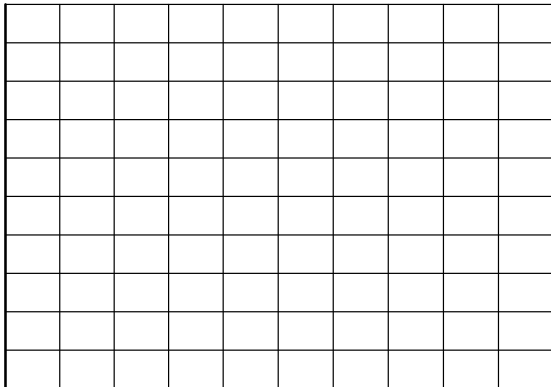


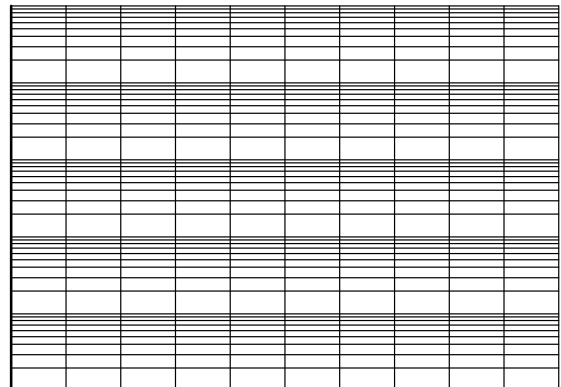
Figure 2. $V_{CE(sat)}$ vs. I_C

Figure 3. DC Current Gain



V_R , REVERSE VOLTAGE (V)

Figure 4. Output Capacitance

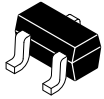


V_{in} , INPUT VOLTAGE (V)

Figure 5. Output Current vs. Input Voltage

I

Figure 6. Input Voltage vs. Output Current

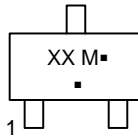


SCALE 4:1

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

DATE 11 OCT 2022

**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-

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

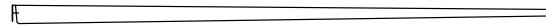
STYLE 10:
PIN 1. CATHODE
2. ANODE
3. ANODE-CATHODE

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



-

RECOMMEND



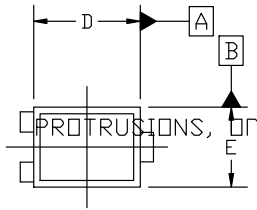


SOT-1123 0.80x0.60x0.37, 0.35P
CASE 524AA
ISSUE D

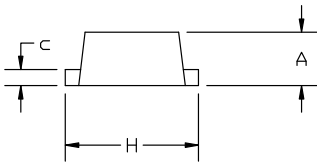
DATE 18 JAN 2024

NOTES:

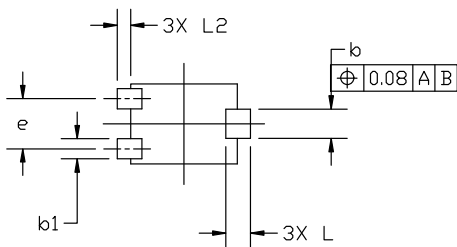
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2018.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS, ASH,



TOP VIEW



SIDE VIEW

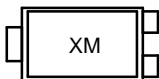


BOTTOM VIEW

← GATE BURRS.

MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.34	0.37	0.40
b	0.15	0.22	0.2
			0.5
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

GENERIC MARKING DIAGRAM*



- X = Specific Device Code
- M = Date Code

RECOMMENDED MOUNTING FOOTPRINT

*

*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

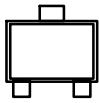
STYLE 3:
 PIN 1. ANODE
 2. ANODE
 3. CATHODE

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

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

SOT-723 1.20x0.80x0.50, 0.40P

GENERIC
MARKING



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