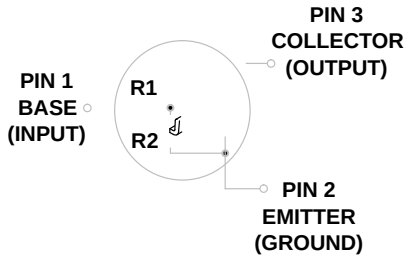
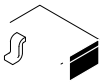




	V_{CEO}	50	Vdc
Collector Current − Continuous	I_C	100	mAdc

VV

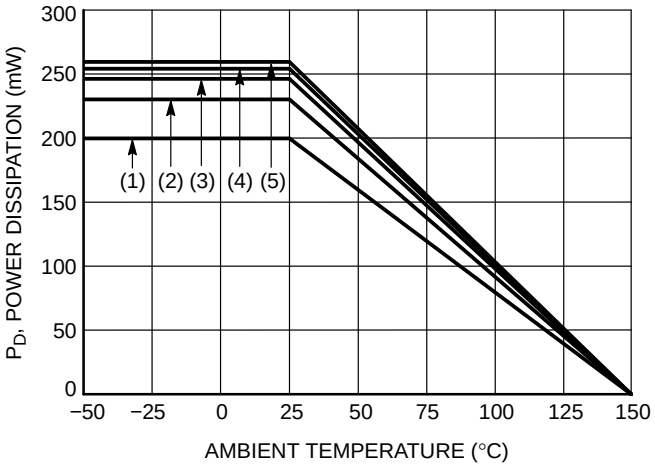
Table 1. ORDERING INFORMATION

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 mm^2, 1 oz. copper trace
(5) SOT−723; Minimum Pad

Figure 1. Derating Curve

Table 2. THERMAL CHARACTERISTICS

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

Table 2. THERMAL CHARACTERISTICS

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

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

Table 3. ELECTRICAL CHARACTERISTICS (T_A = 25°C, unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					

TYPICAL CHARACTERISTICS
MUN2132, MMUN2132L, MUN5132, DTA143EE, DTA143EM3

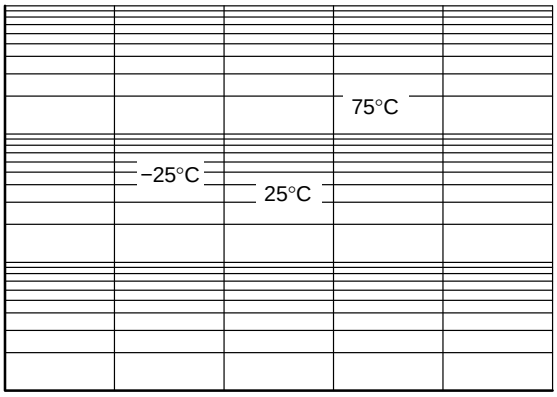
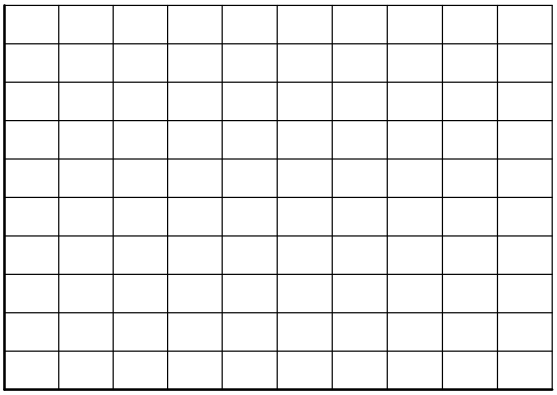


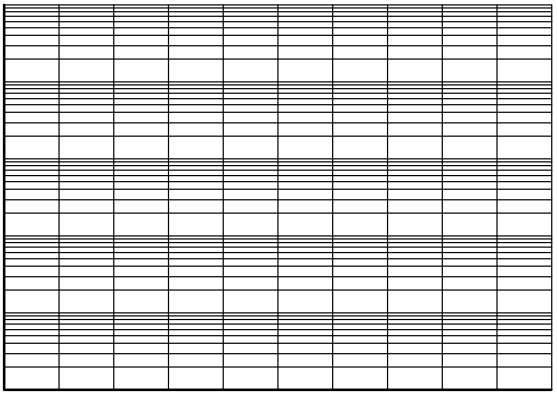
Figure 2. $V_{CE(sat)}$ vs. I_C

Figure 3. DC Current Gain



V_R, REVERSE VOLTAGE (V)

Figure 4. Output Capacitance

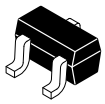


V_{in}, INPUT VOLTAGE (V)

Figure 5. Output Current vs. Input Voltage

I

Figure 6. Input Voltage vs. Output Current

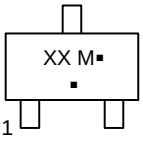


SCALE 4:1

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

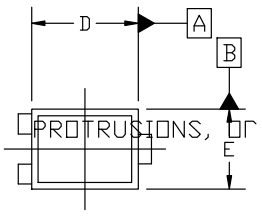
STYLE 10:
PIN 1. CATHODE
2. ANODE
3. ANODE-CATHODE

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

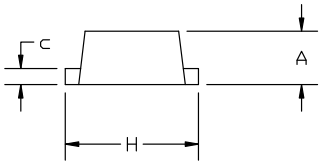
RECOMMEND

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

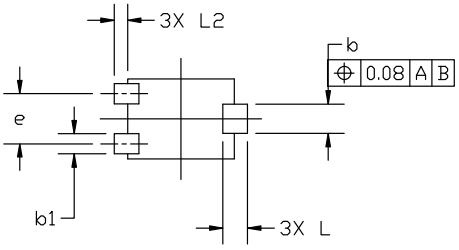
DATE 18 JAN 2024



TOP VIEW



SIDE VIEW



BOTTOM VIEW

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

 < GATE BURRS.

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

*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

*

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