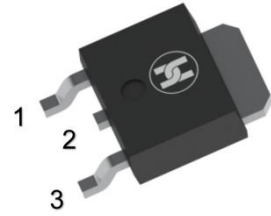
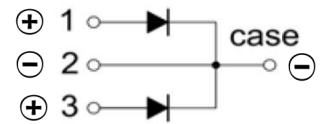


**SCHOTTKY BARRIER DIODE**
**FEATURES**

- Low power loss, high efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Guard Ring for over voltage protection
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications


**TO-263**
**MECHANICAL DATA**

- Case: TO-263
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 1.60 grams (approximate)


**MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
DC Reverse Voltage	V <sub>R</sub>	100	V
RMS Reverse Voltage	V <sub>RMS</sub>	70	V
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	I <sub>FSM</sub>	120	A
Mean rectifying current	I <sub>F</sub>	10	A
Power dissipation	P <sub>D</sub>	2	W
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	50	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature	T <sub>STG</sub>	-55 ~+150	°C

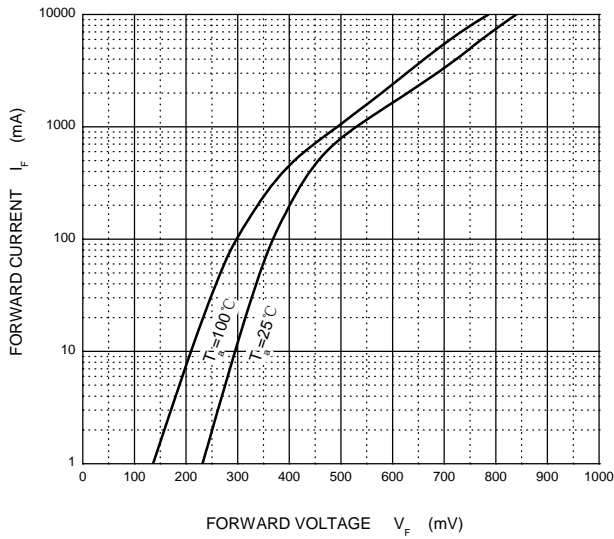
**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)**

Parameter	Symbol	Min	Max	Unit	Conditions
Forward voltage	V <sub>F</sub>		0.85	V	I <sub>F</sub> =5A
			0.95	V	I <sub>F</sub> =10A (Pulse Test)
Reverse current	I <sub>R</sub>		10	μA	V <sub>R</sub> =100V
Reverse voltage	V <sub>R</sub>	100		V	I <sub>R</sub> =0.1mA
Junction capacitance	C <sub>J</sub>		90	pF	V <sub>R</sub> =4V, f=1MHz

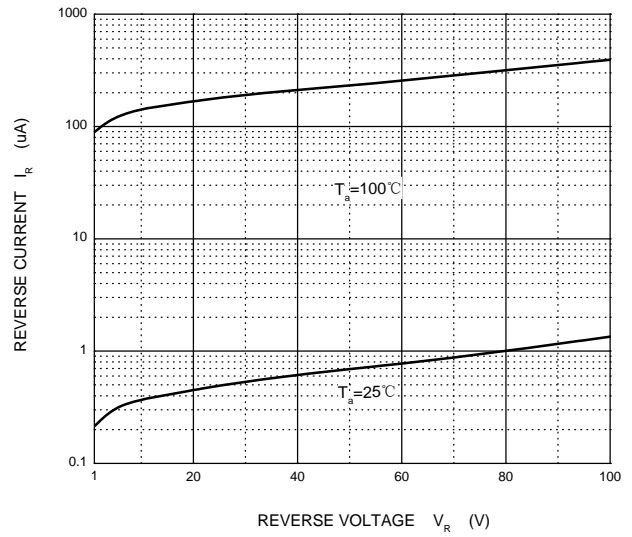
SCHOTTKY BARRIER DIODE

**Typical Characteristics**

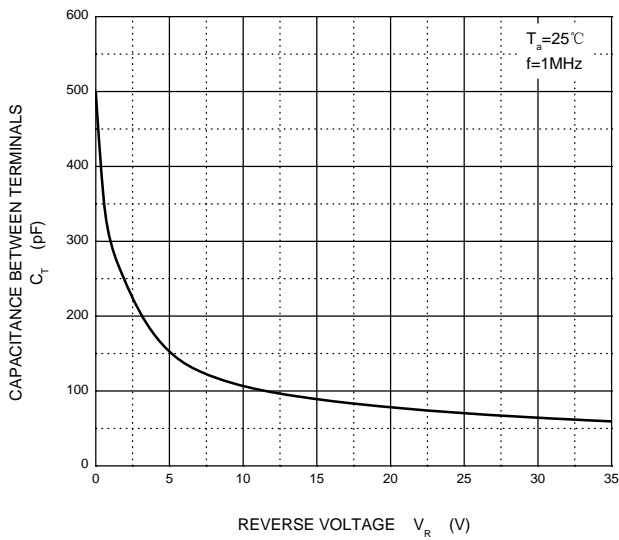
**Forward Characteristics**



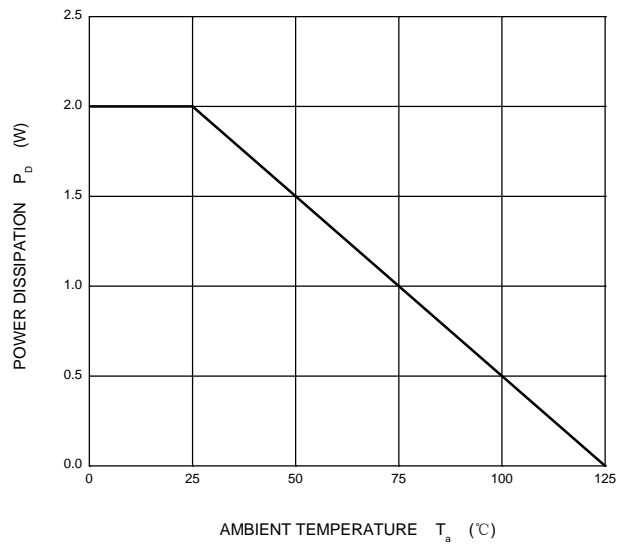
**Reverse Characteristics**

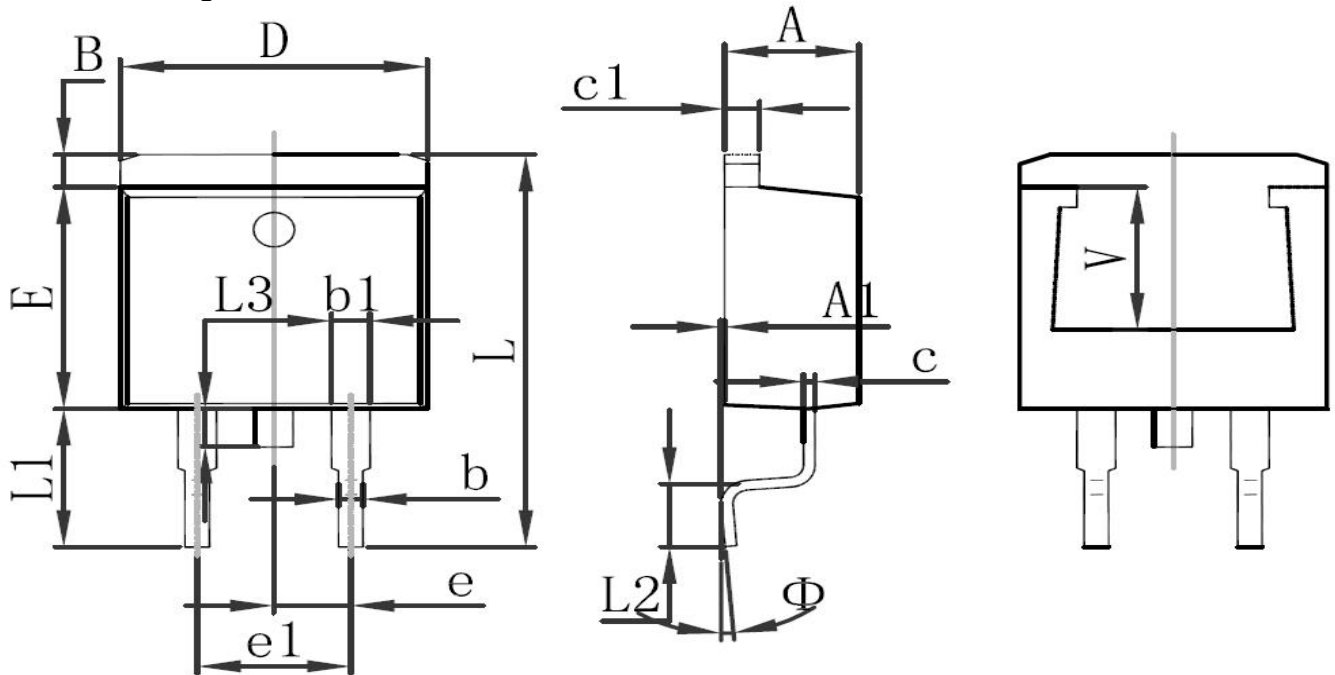


**Capacitance Characteristics**

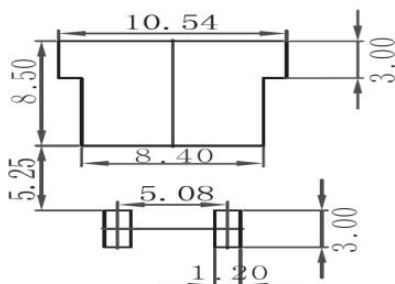


**Power Derating Curve**



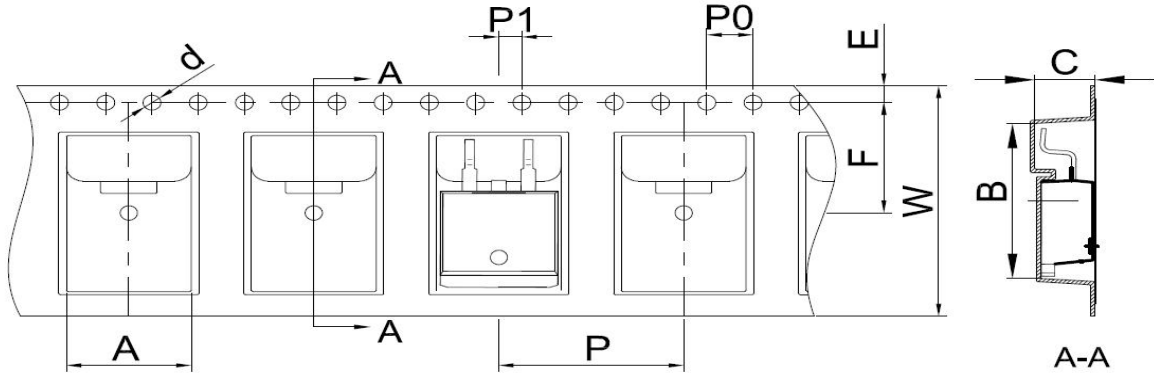
**SCHOTTKY BARRIER DIODE**
**TO-263 Package Outline Dimensions**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.470	4.670	0.176	0.184
A1	0.000	0.150	0.000	0.006
B	1.120	1.420	0.044	0.056
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.3310	0.394	0.406
E	8.500	8.900	0.335	0.350
e	2.540Typ		0.100Typ	
e1	4.980	5.180	0.196	0.204
L	14.940	15.500	0.588	0.610
L1	4.950	5.450	0.195	0.215
L2	2.340	2.740	0.092	0.108
L3	1.300	1.700	0.051	0.067
∅	0°	8°	0°	8°
V	5.600REF		0.220REF	

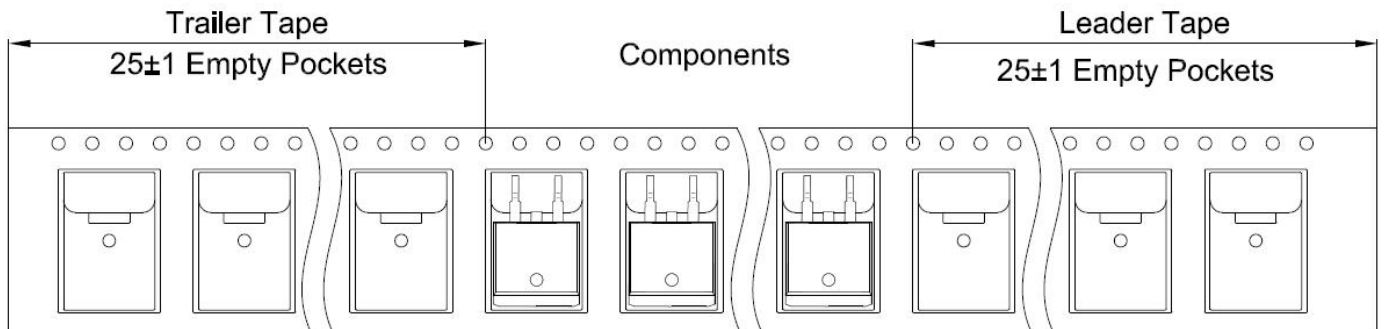
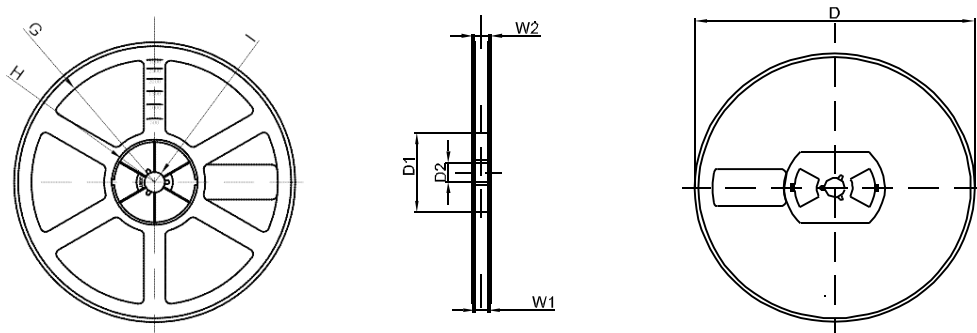
**TO-263 Suggested Pad Layout**

**Note:**

1. Controlling dimension: in millimeters
2. General tolerance:  $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

SCHOTTKY BARRIER DIODE

**TO-263 Tape and Reel**
**TO-263 Embossed Carrier Tape**


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
TO-263	10.80	16.13	5.21	Ø1.55	1.75	11.50	4.00	16.00	2.00	24.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

**TO-263 Tape Leader and Trailer**

**TO-263 Reel**


DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
13" DIA	Ø330	100	21	R165	R50	R6.5	24.4	30.40
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1