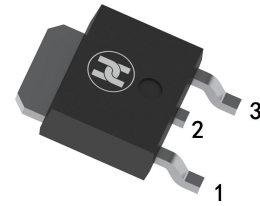


## SCHOTTKY BARRIER RECTIFIER

### FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

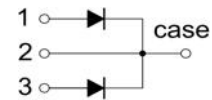
TO-252



1. ANODE 2. CATHODE 3. ANODE

### MECHANICAL DATA

- Case: TO-252
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 2.30 grams (approximate)



### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

Parameter	Symbol	Value	Unit	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	V	
Maximum RMS Voltage	$V_{RMS}$	70	V	
Maximum DC Blocking Voltage	$V_{R(DC)}$	100	V	
Maximum Average Forward Current	$I_{F(AV)}$	20	A	
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	300	A	
Maximum Forward Voltage	$V_F$	0.85	V	
Maximum DC Reverse Current	$I_R$	$T_j=25^{\circ}\text{C}$	5	$\mu\text{A}$
		$T_j=125^{\circ}\text{C}$	20	mA
Maximum Operating Junction Temperature	$T_j$	150	$^{\circ}\text{C}$	
Storage Temperature	$T_{stg}$	-40~+150	$^{\circ}\text{C}$	

SCHOTTKY BARRIER RECTIFIER

**Typical Characteristics**

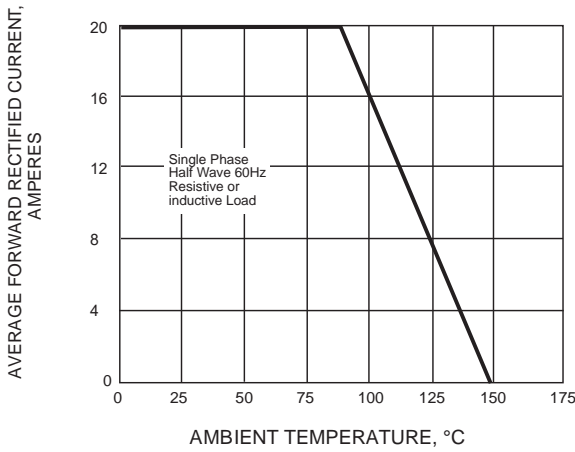


Fig.1 FORWARD CURRENT ERATING CURVE

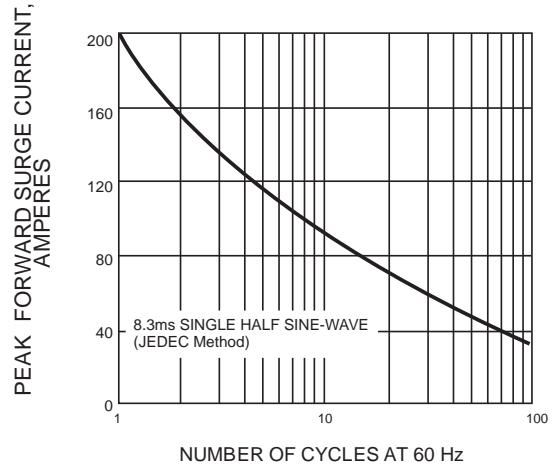


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

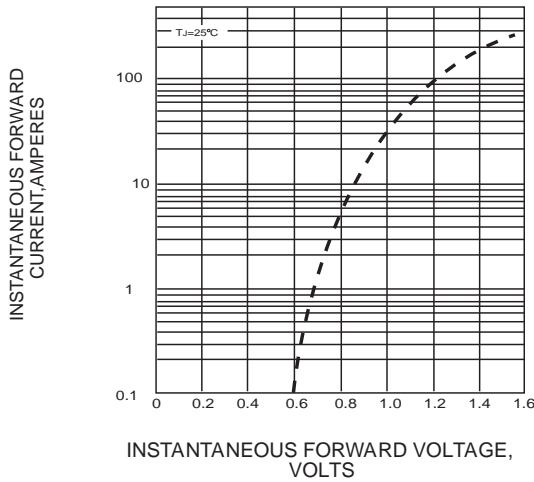


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

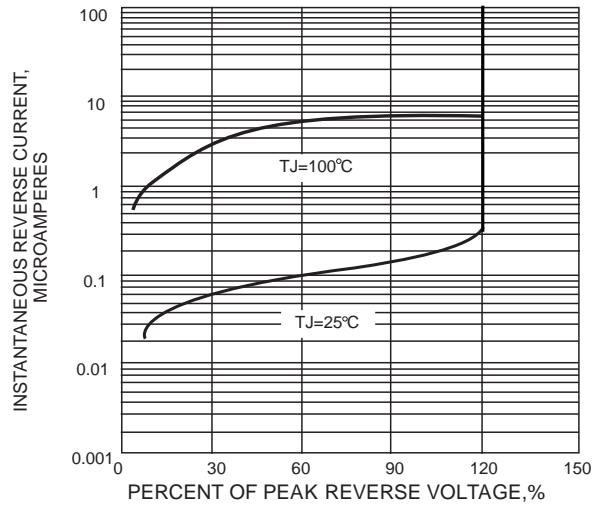
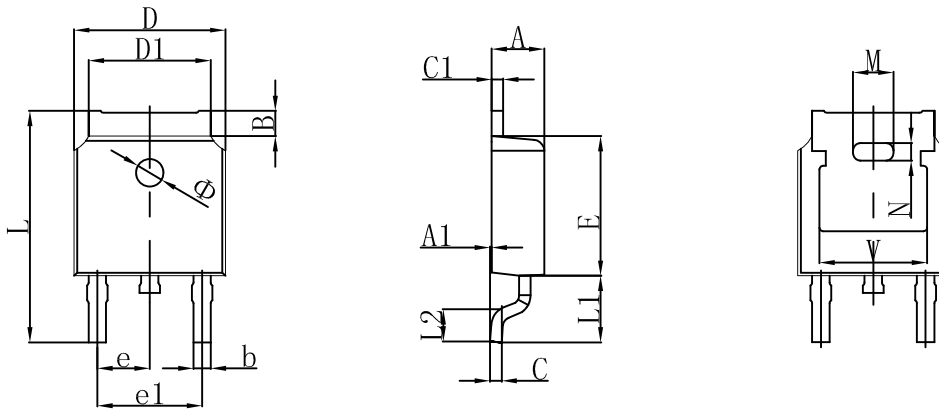
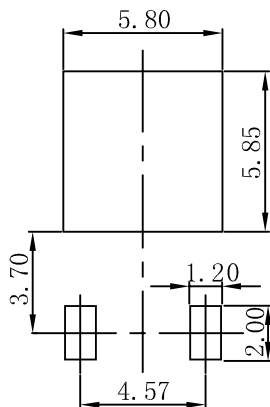


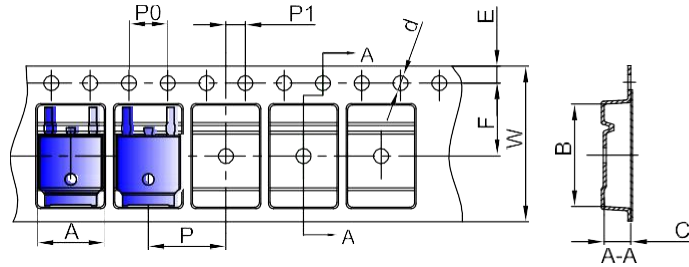
FIG. 4-TYPICAL REVERSE CHARACTERISTICS

**SCHOTTKY BARRIER RECTIFIER**
**TO-252 Package Outline Dimensions**


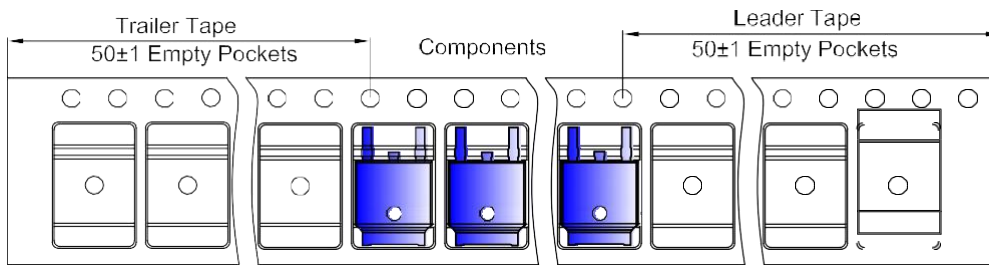
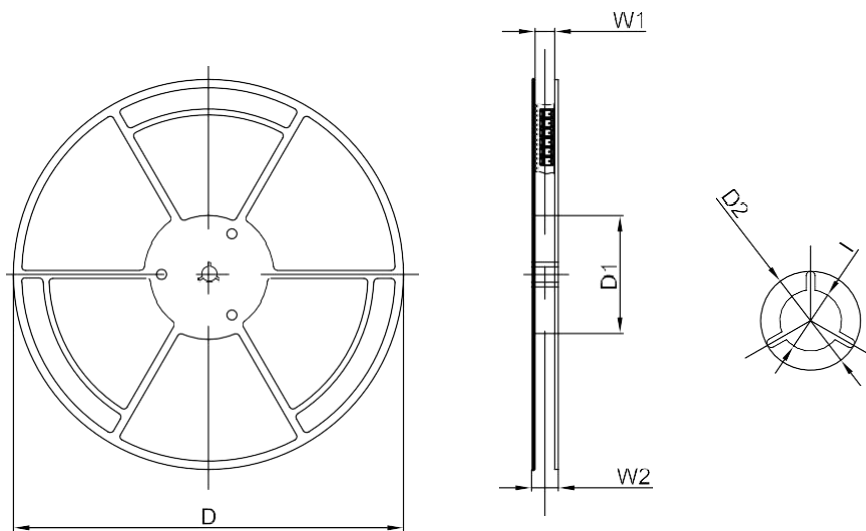
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A1	0.000	0.100	0.000	0.004
B	0.800	1.400	0.031	0.055
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
c1	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
E	6.000	6.200	0.236	0.244
e	2.286 TYP.		0.090 TYP.	
e1	4.327	4.727	0.170	0.186
M	1.778REF.		0.070REF.	
N	0.762REF.		0.018REF.	
L	9.800	10.400	0.386	0.409
L1	2.9REF.		0.114REF.	
L2	1.400	1.700	0.055	0.067
V	4.830 REF.		0.190 REF.	
Φ	1.100	1.300	0.043	0.051

**TO-252 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 RECTIFIER**
**To-252 Tape and Reel**
**TO-252 Embossed Carrier Tape**


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
TO-252	6.90	10.50	2.70	Ø1.55	1.75	7.50	4.00	8.00	2.00	16.00

**TO-252 Tape Leader and Trailer**

**TO-252 Reel**


Dimensions are in millimeter						
Reel Option	D	D1	D2	W1	W2	I
13" Dia	330.00	100.00	Ø21.00	16.40	21.00	Ø13.00