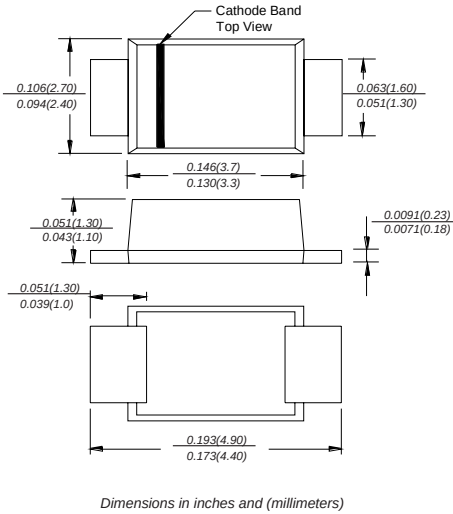


SMAF

FEATURES



- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals
- ◆ Glass passivated chip junction

MECHANICAL DATA

Case: JEDEC SMAF molded plastic body over passivated chip
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.0018 ounce, 0.064 grams

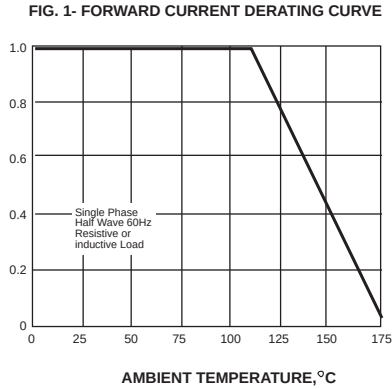
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

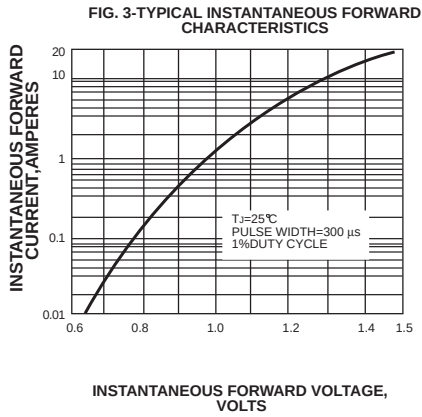
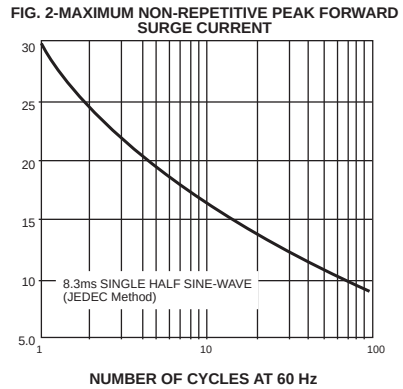
MDD Catalog Number	SYMBOLS	M1F	M2F	M3F	M4F	M5F	M6F	M7F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=75^\circ\text{C}$	I_{AV}	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50.0							μA
Typical junction capacitance (NOTE 1)	C_J	15.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150							$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

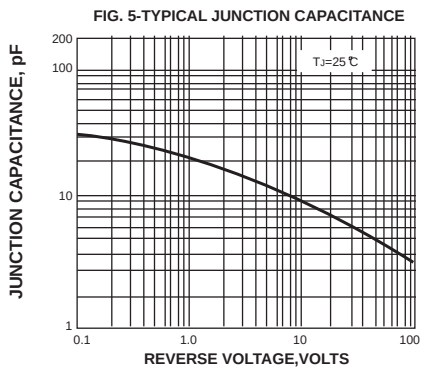
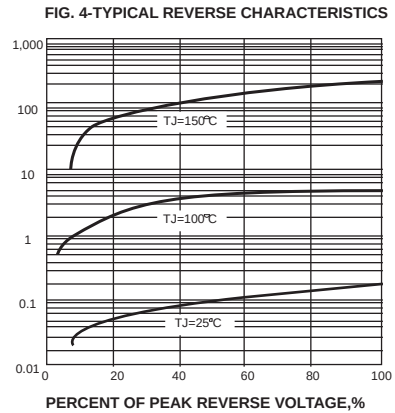
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



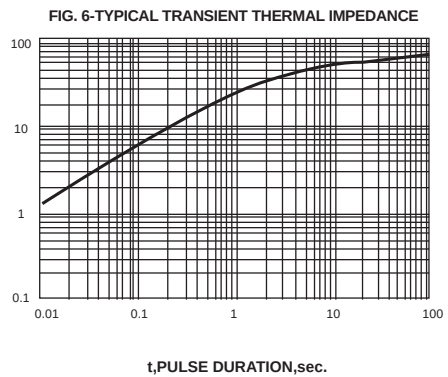
PEAK FORWARD SURGE CURRENT,
AMPERES



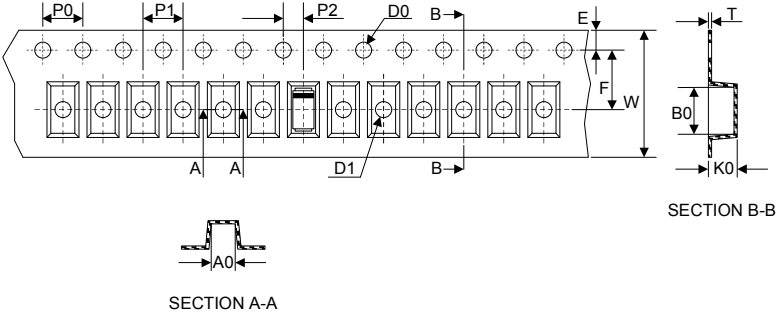
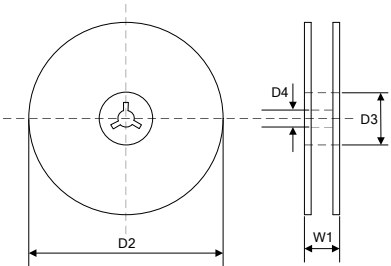
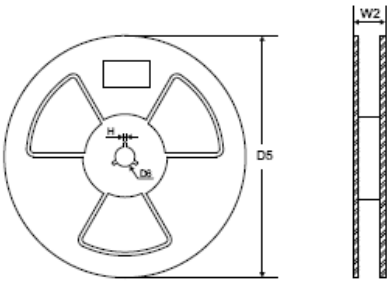
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES



TRANSIENT THERMAL IMPEDANCE,
°C/W



Packaging

Tape  SECTION A-A SECTION B-B	<table> <tr> <th>Symbol</th><th>Dimension (mm)</th></tr> <tr> <td>W</td><td>12.00±0.20</td></tr> <tr> <td>P0</td><td>4.00±0.10</td></tr> <tr> <td>P1</td><td>4.00±0.10</td></tr> <tr> <td>P2</td><td>2.00±0.10</td></tr> <tr> <td>D0</td><td>Φ1.5±0.10</td></tr> <tr> <td>D1</td><td>Φ1.5±0.10</td></tr> <tr> <td>E</td><td>1.75±0.10</td></tr> <tr> <td>F</td><td>5.50±0.05</td></tr> <tr> <td>A0</td><td>2.79±0.10</td></tr> <tr> <td>B0</td><td>5.33±0.10</td></tr> <tr> <td>K0</td><td>2.55±0.15</td></tr> <tr> <td>T</td><td>0.25±0.05</td></tr> </table>	Symbol	Dimension (mm)	W	12.00±0.20	P0	4.00±0.10	P1	4.00±0.10	P2	2.00±0.10	D0	Φ1.5±0.10	D1	Φ1.5±0.10	E	1.75±0.10	F	5.50±0.05	A0	2.79±0.10	B0	5.33±0.10	K0	2.55±0.15	T	0.25±0.05
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7" Reel 	<table> <tr> <td>D2</td><td>Φ178.0±2.0</td></tr> <tr> <td>D3</td><td>Φ50.0Min.</td></tr> <tr> <td>D4</td><td>Φ13.0±0.5</td></tr> <tr> <td>W1</td><td>16.0±2.0</td></tr> <tr> <td colspan="2">Quantity: 3000PCS</td></tr> </table>	D2	Φ178.0±2.0	D3	Φ50.0Min.	D4	Φ13.0±0.5	W1	16.0±2.0	Quantity: 3000PCS																	
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Quantity: 3000PCS																											
13" Reel 	<table> <tr> <td>D5</td><td>Φ330.0±2.0</td></tr> <tr> <td>D6</td><td>Φ13.5±0.5</td></tr> <tr> <td>H</td><td>2.5±1.0</td></tr> <tr> <td>W2</td><td>16.0±2.0</td></tr> <tr> <td colspan="2">Quantity: 10000PCS</td></tr> </table>	D5	Φ330.0±2.0	D6	Φ13.5±0.5	H	2.5±1.0	W2	16.0±2.0	Quantity: 10000PCS																	
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