

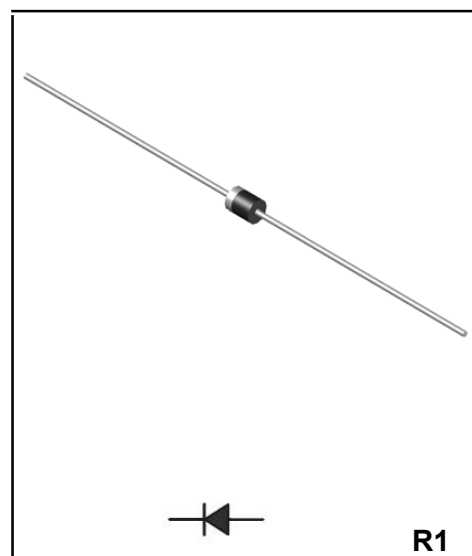
General-purpose Plastic Rectifiers

Reverse Voltage - 1600 V

Forward Current – 1.0 A

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed:
260 °C/10seconds, 9.5mm lead length
- Lead and body according with RoHS standard



MECHANICAL DATA

- Case: R-1 Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free

Maximum Ratings & Characteristics

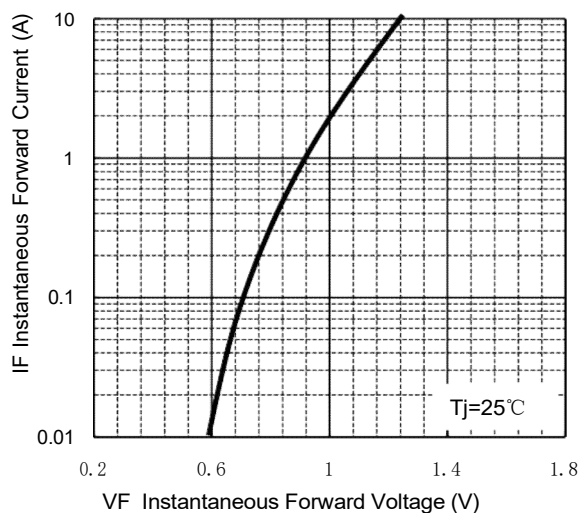
Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	1A16F	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum RMS voltage	V_{RMS}	1120	V
Maximum DC blocking voltage	V_{DC}	1600	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0	A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1	V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^{\circ}\text{C}$	I_R	5 500	μA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50	$^{\circ}\text{C}/\text{W}$
Type junction capacitance $V_R = 4.0\text{V}$, $f = 1\text{MHz}$	C_J	15	pF
Operating junction and storage temperature rang	T_J, T_{STG}	-55 --- +150	$^{\circ}\text{C}$

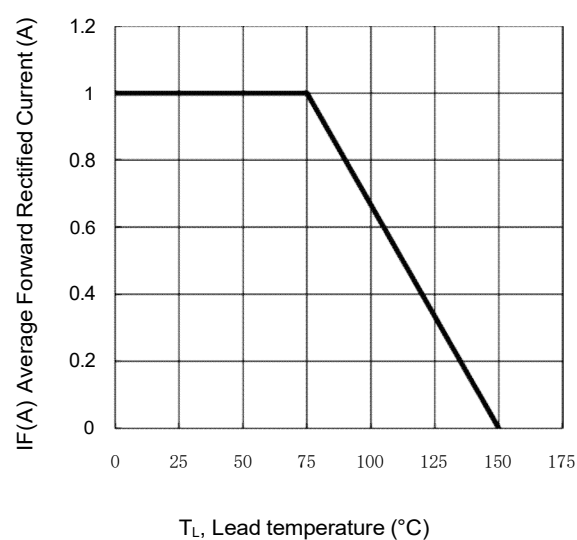
Note: 1. Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

Characteristic Curves

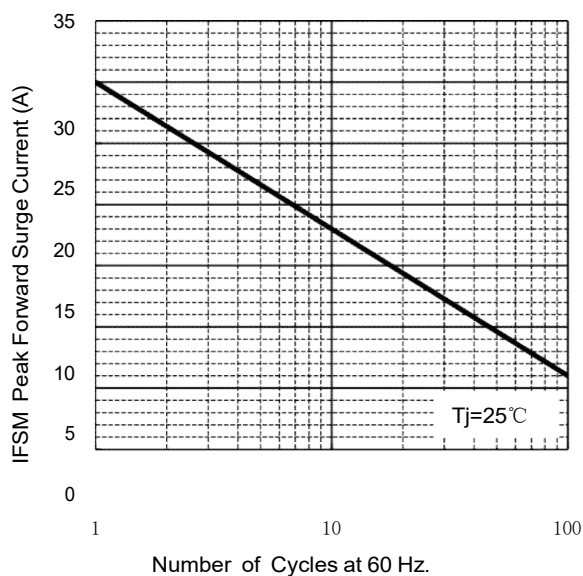
TYPICAL FORWARD CHARACTERISTIC



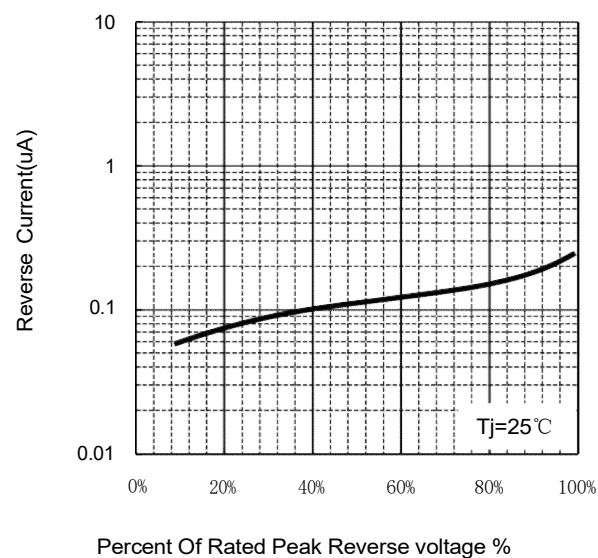
FORWARD CURRENT DERATING CURVE



**MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT**



Typical Reverse Characteristics



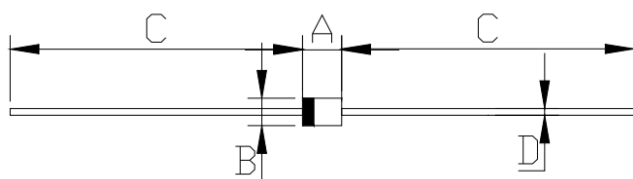
Ordering information

Package	Packing Description	Packing Quantity
R-1	bulk	1000PCS/Inner Box 30000PCS/Carton
	ammo pack	5000PCS/Inner Box 50000PCS/Carton

Package Dimensions

R-1

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	3.00	3.30	0.118	0.130
B	2.00	2.70	0.079	0.106
C	25.4	-	1	-
D	0.53	0.64	0.021	0.025



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