


R-1		Features					
		<ul style="list-style-type: none"> Metal-Semiconductor junction with guardring Epitaxial construction Low forward voltage drop High current capability Moisture sensitivity: level 1, per J-STD-020 AEC-Q101 qualified High temperature soldering guaranteed: 260°C/10 seconds Halogen-free according to IEC 61249-2-21 definition 					
Primary characteristics		Applications					
$I_{F(AV)}$	1A	For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications					
V_{RRM}	20V to 60V						
I_{FSM}	40A						
I_{RM}	0.5mA						
V_{FM} at $I_F=1A$	0.55/0.7V						
T_J max.	150 °C						
		Mechanical data					
		<ul style="list-style-type: none"> R-1 Epoxy meets UL 94 V-0 flammability rating Terminals: Tin plated leads. Polarity: As marked. 					
Maximum rating (Ta=25°C unless otherwise noted)							
Parameter	Sym	R-1					Unit
		1K2	1K3	1K4	1K5	1K6	
Max. repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	V
Max. RMS reverse voltage	V_{RMS}	14	21	28	35	42	V
Max. DC blocking voltage	V_{DC}	20	30	40	50	60	V
Max. average forward current	$I_{F(AV)}$	1					A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40					A
Max. instantaneous forward voltage drop per diode	V_{FM}	0.55		0.7			V
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	0.5					mA
	Ta=125 °C	10					
Operating junction temperature	T_J	-55 ~ +150					°C
Storage temperature	T_{STG}	-55 ~ +150					°C
Typical thermal resistance (Note1)	$R_{\theta J-A}$	50					°C/W

Notes:

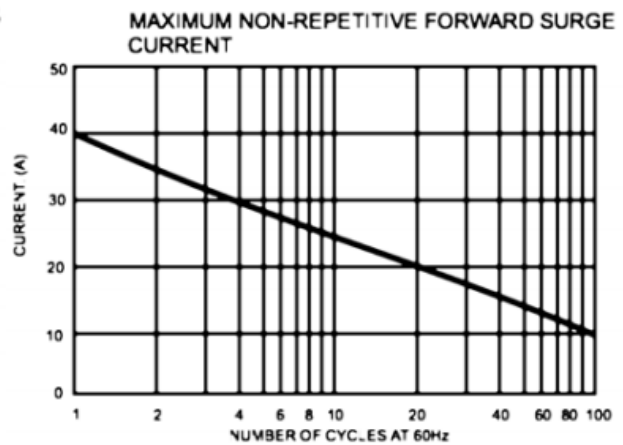
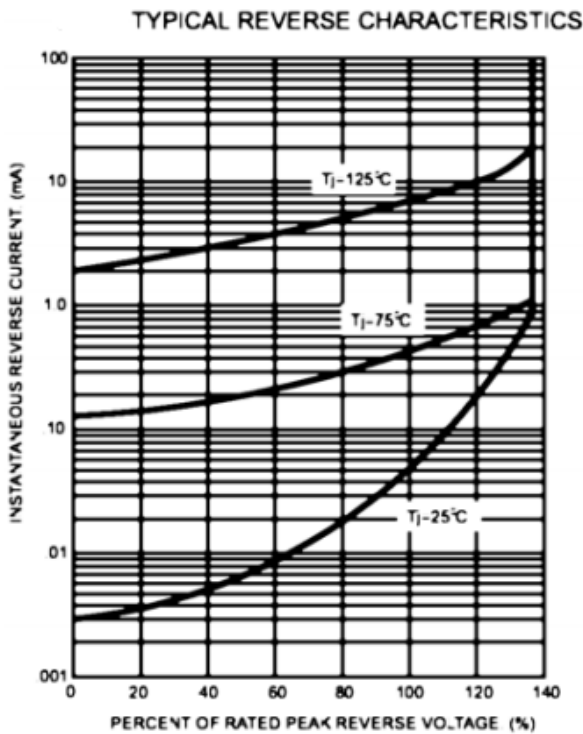
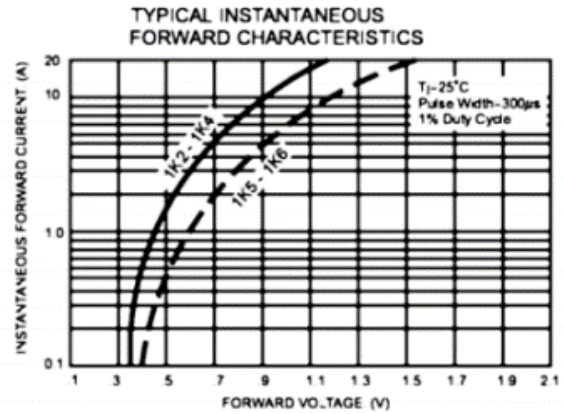
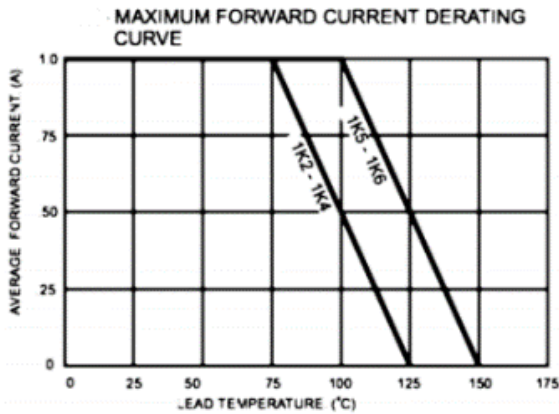
1 The thermal resistance from junction to ambient



Ordering information (Example)

PREFERRED	UNITWEIGHT(g)	PREFERREDPACKAGECODE	BASEQUANTITY	DELIVERYMODE
1K2				

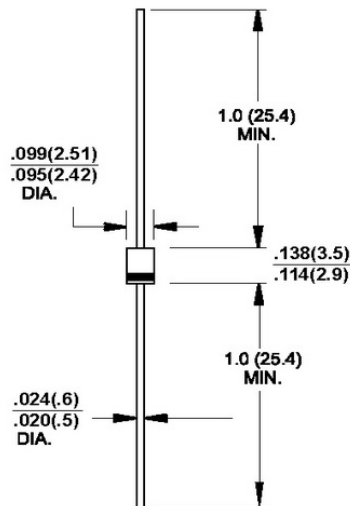
Typical characteristics





Package outline dimensions

R-1



Dimensions in inches and (millimeters)

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