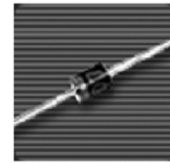
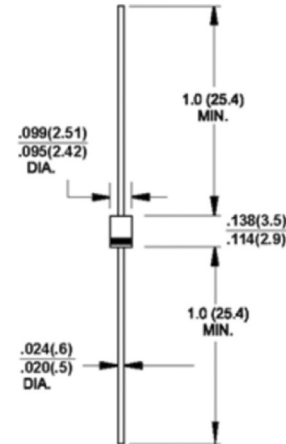


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Guardring for overvoltage protection
- For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed:
250°C/10Seconds, 0.375"(9.5 mm) lead length at 5 lbs.(2.3Kg) tension


R-1

Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic body
- Terminals: Plated Axial leads,solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode
- Mounting position:Any
- Weight: 0.007ounce,0.20gram

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)								
PARAMETER	SYMBOL	1K2	1K3	1K4	1K5	1K6	UNIT	
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	V	
Maximum RMS voltage	VRMS	14	21	28	35	42	V	
Maximum DC blocking voltage	VDC	20	30	40	50	60	V	
Maximum average forward rectified current at TL	IF(AV)	1.0						A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	40						A
Maximum forward voltage at 1.0A DC	VF	0.5			0.70		V	
Maximum DC reverse current at rated DC blocking voltage	T _J =25°C	0.1					mA	
	T _J =125°C	8						
Typical thermal resistance ¹⁾	R _{θJA}	100					°C/W	
	R _{θJC}	55						
	R _{θJL}	50						
Typical junction capacitance ²⁾	C _j	110			80		pF	
Operating junction temperature range	T _J	- 55 to + 125			- 55 to + 150		°C	
Storage temperature range	T _{STG}	- 55 to + 150					°C	

Notes: 1. Thermal Resistance at .375(9.5mm) Lead Length, PC Board Mounted

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

RATINGS AND CHARACTERISTICS CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

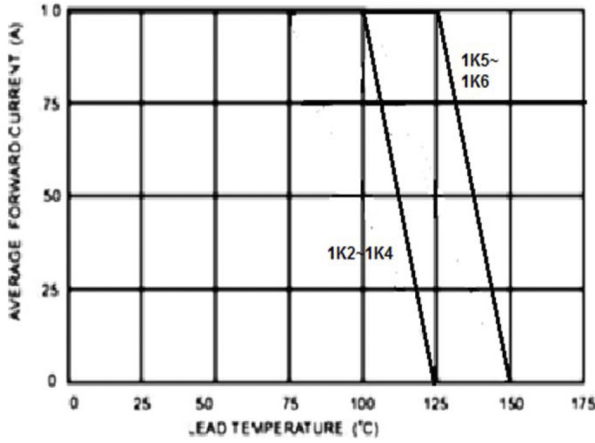


FIG.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

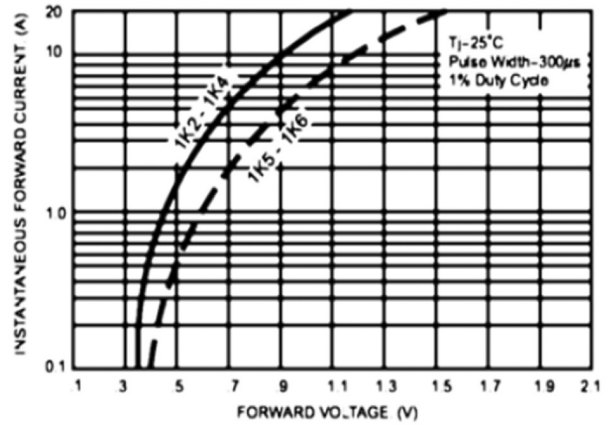


FIG.3- TYPICAL REVERSE CHARACTERISTICS

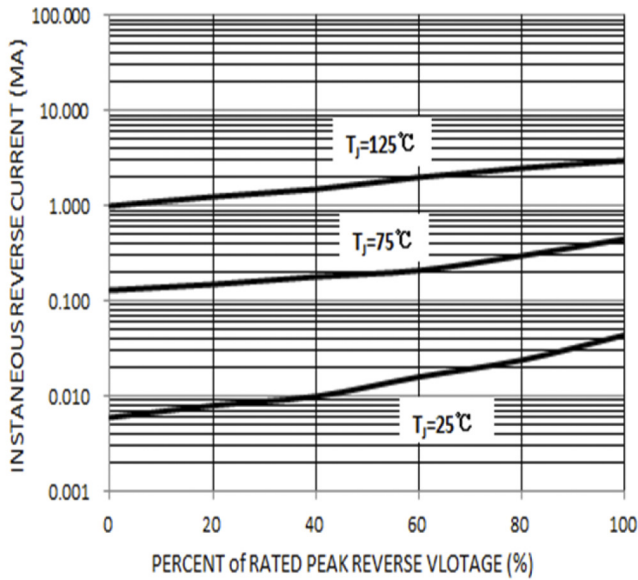


FIG.4- TYPICAL JUNCTION CAPACITANCE

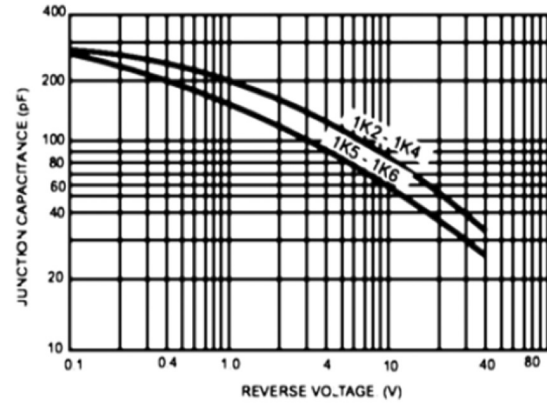


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

