



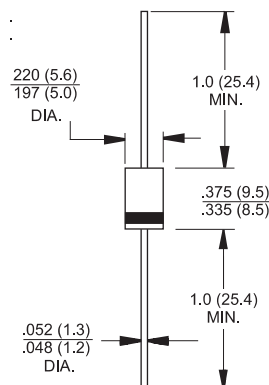
DO-27

Features

- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss

Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed:
260°C/10 seconds/.375", (9.5mm) lead
lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 1.2 grams



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	HVR512	HVR514	HVR516	HVR518	HVR520	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1200	1400	1600	1800	2000	V
Maximum RMS Voltage	V _{RMS}	840	980	1120	1260	1400	V
Maximum DC Blocking Voltage	V _{DC}	1200	1400	1600	1800	2000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T _A = 75°C	I <sub(av)< sub=""></sub(av)<>	5.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	200					A
Maximum Instantaneous Forward Voltage@ 3.0A	V _F	2.2					V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =125°C	I _R	10.0 100					μA μA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @T _L =75°C	HT _{IR}	30					μA
Typical Junction Capacitance (Note 1)	C _J	40					pF
Typical Thermal Resistance (Note 2)	R _{θJA}	40					°C/W
Operating Temperature Range	T _J	-65 to +150					°C
Storage Temperature Range	T _{STG}	-65 to +150					°C

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

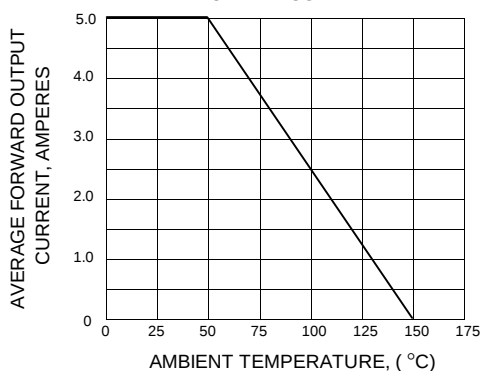


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

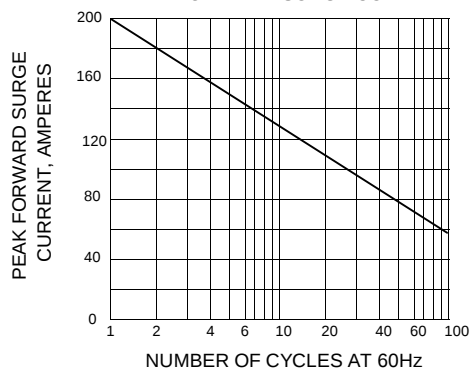


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

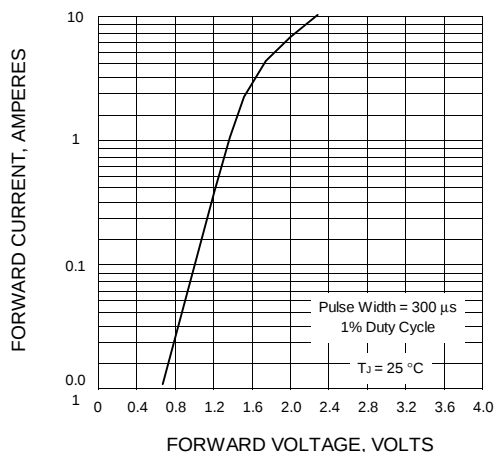
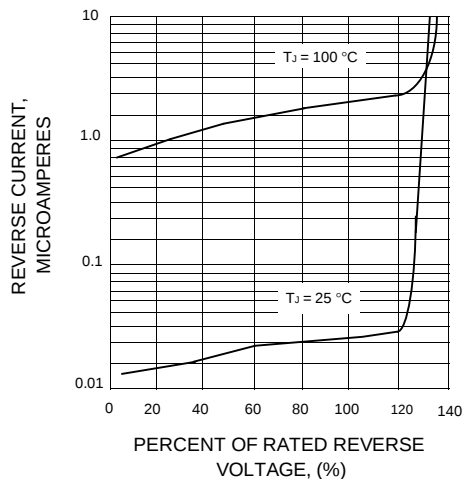


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-27	1250/AMMO	12500	40X26.5X30	14.00	12.00