



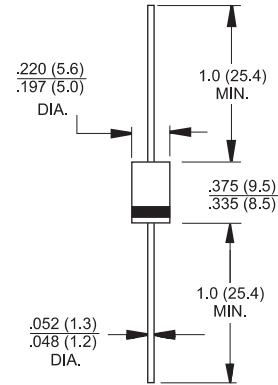
### DO-27

## Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

## Mechanical Data

- Case: JEDEC DO-27, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.032ounces ,0.9grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version,**



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	15SQ030	15SQ035	15SQ040	15SQ045	15SQ050	15SQ060	15SQ080	15SQ100	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	21	24.5	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	35	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current@Tc=95 °C	I <sub>(AV)</sub>	15								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	I <sub>FSM</sub>	320								A
Peak Forward Voltage at 10A DC(Note1)	V <sub>F</sub>	0.55				0.7		0.8		V
Maximum DC Reverse Current @Tj=25°C	I <sub>R</sub>	0.5					0.1		10	mA
at Rated DC Blocking Voltage @Tj=100°C		50								
Typical Junction Capacitance (Note2)	C <sub>J</sub>	450								PF
Typical Thermal Resistance (Note3)	R <sub>J</sub>	3.0								°C/w
Operating Temperature Range	T <sub>J</sub>	-55 to+200								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to+200								°C

NOTES:1.300us Pulse Width, 2%Dudy Cycle.

2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.

3.Thermal Resistance Junction to Case.



### Ratings and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

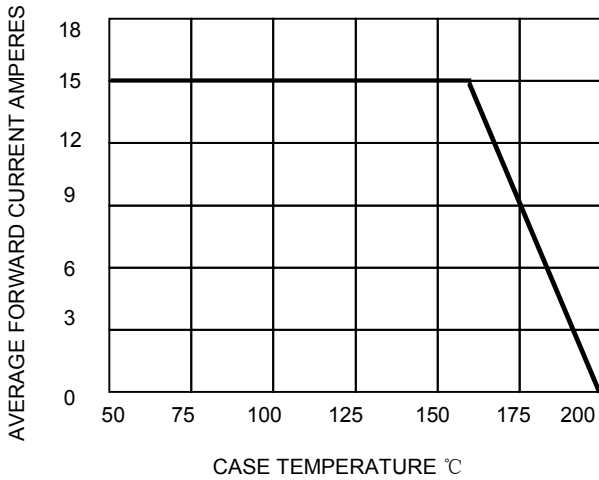


FIG.2-MAXIMUM NON-REPETITIVE SURGE

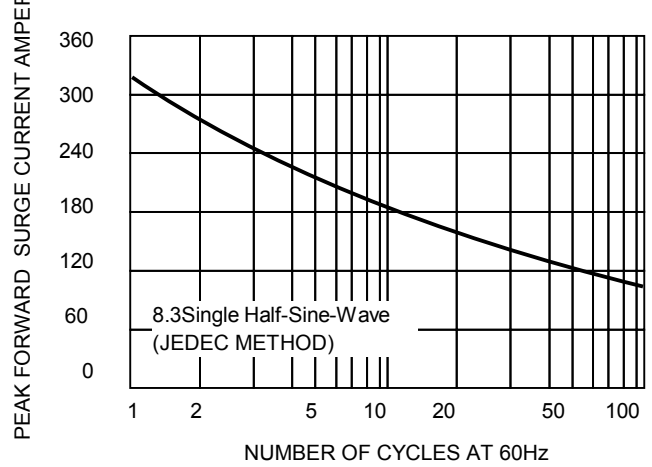


FIG.3-TYPICAL REVERSE CHARACTERISTICS

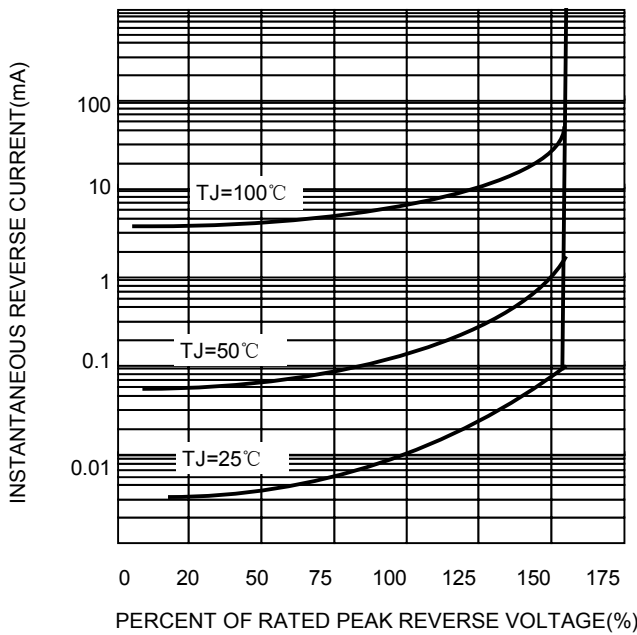


FIG.4-TYPICAL FORWARD CHARACTERISTICS

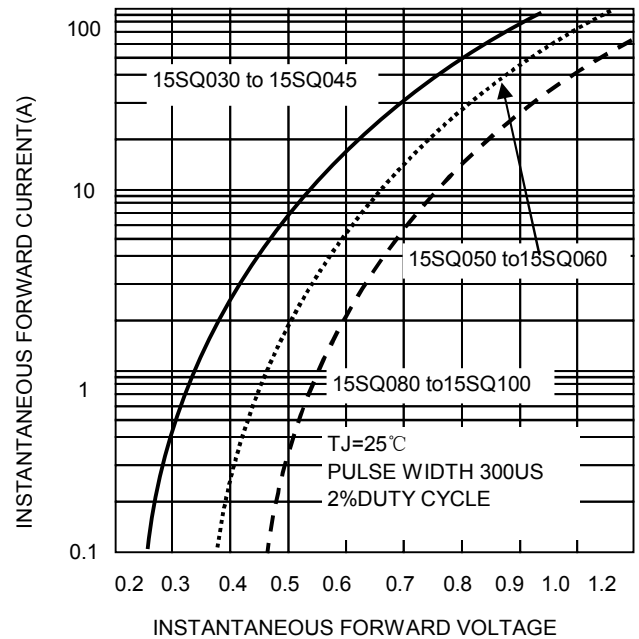
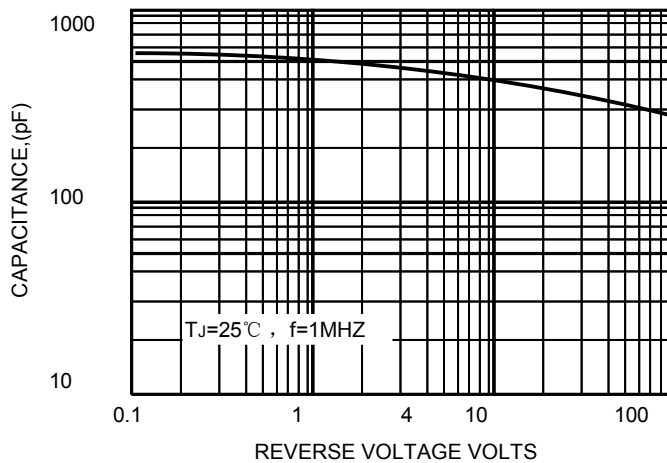


FIG.5-TYPICAL JUNCTION CAPACITANCE



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