

SK1M16

PRV : 1600 V
Io : 1.5 A

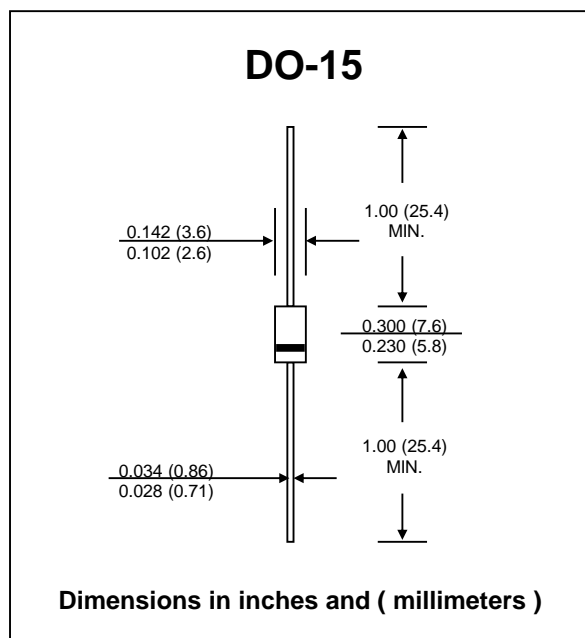
FEATURES :

- * Glass passivated junction chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-15 Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.4 gram

HIGH VOLTAGE RECTIFIER DIODE



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 50 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1600	V
Maximum Working Reverse Voltage	V_{RWM}	1600	V
Maximum Average Forward Current	$I_{F(AV)}$	1.5	A
Peak Forward Surge Current 10ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	60	A
Rating for fusing at (t < 10 ms.)	I^2t	18	A ² S
Forward Voltage at $I_F = 1.5 A$	V_F	1.2	V
Maximum DC Reverse Current at rated DC Blocking Voltage	I_R	5.0	μA
	$I_{R(H)}$	300	μA
Thermal Resistance From Junction to Ambient ($T_a = T_L$; Lead Length = 10 mm)	$R_{th j-a}$	85	K/W
Junction Temperature Range	T_j	- 40 to + 150	°C
Storage Temperature Range	T_{STG}	- 40 to + 150	°C

RATING AND CHARACTERISTIC CURVES (SK1M16)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

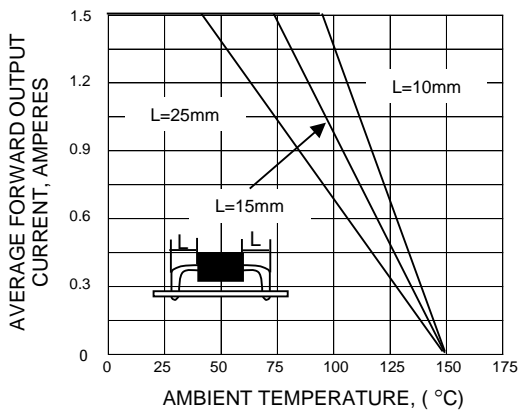


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

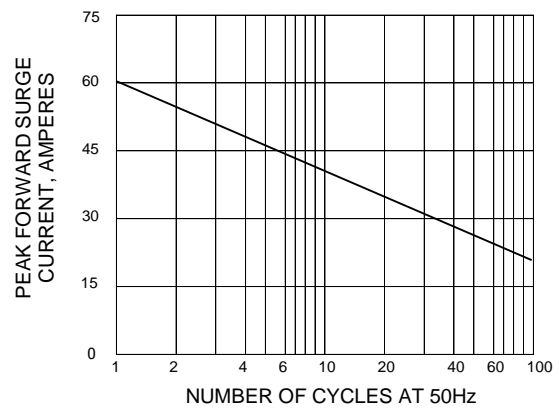


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

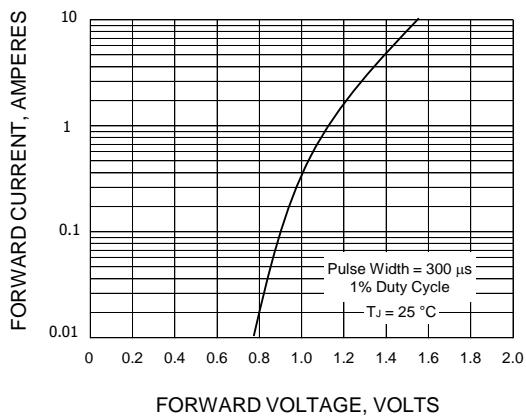


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

