

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

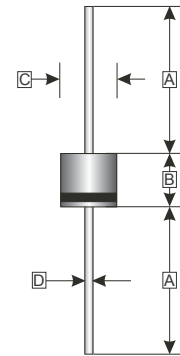
FEATURES

- Guard ring for overvoltage protection
- Very small conduction losses
- Low forward voltage drop

MECHANICAL DATA

- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Lead free Plating (Tin Finish)
Solderable per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Weight : 1.986 grams (approximate)

R - 6



REF.	Millimeter	
	Min.	Max.
A	25.4 REF	
B	8.6	9.1
C	8.6	9.1
D	1.2	1.3

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Maximum RMS Voltage	V_{RMS}	31.5	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	18	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	300	A
Maximum Instantaneous Forward Voltage $I_F=18A @ 25^\circ\text{C}$	V_F	0.53	V
Maximum DC Reverse Current at rated DC blocking voltage	I_R	$T_C=25^\circ\text{C}$	0.5
		$T_C=100^\circ\text{C}$	40
Typical Junction Capacitance ¹	C_J	1400	pF
Typical Thermal Resistance	$R_{\theta JA}$	12	$^\circ\text{C} / \text{W}$
Operating Temperature Range	T_J	-55 ~ 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ 175	$^\circ\text{C}$

Notes:

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

CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

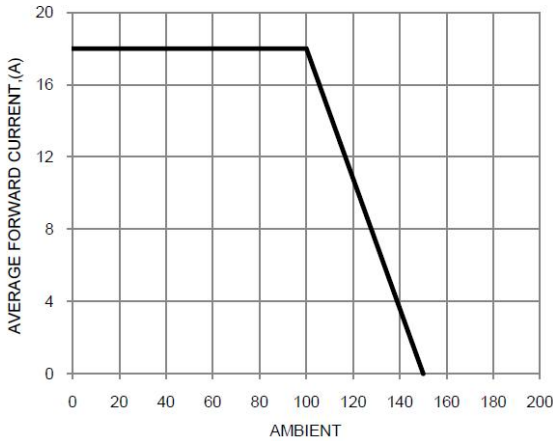


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

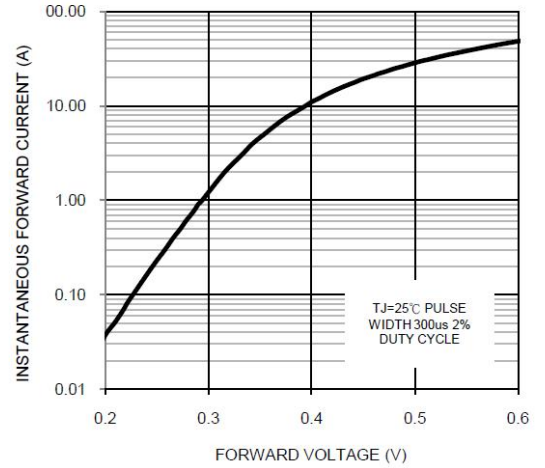


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

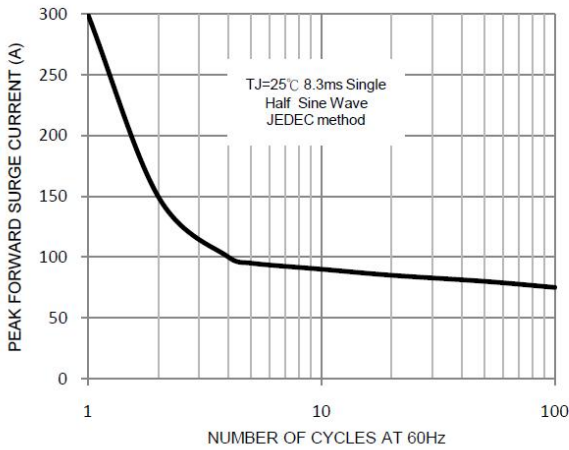


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

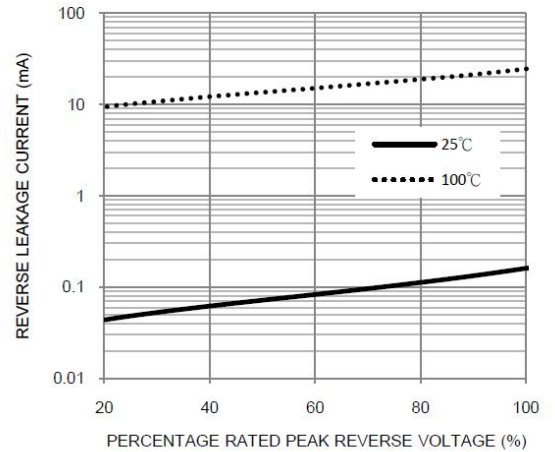


FIG. 5-TYPICAL JUNCTION CAPACITANCE

