

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

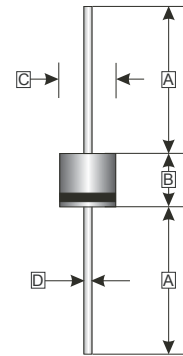
FEATURES

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

MECHANICAL DATA

- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-O
- 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°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)	12	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200	A
Maximum Instantaneous Forward Voltage I _F =12A @ 25°C	V _F	0.55	V
Maximum DC Reverse Current at rated DC blocking voltage	I _R	T _C =25°C	0.5
		T _C =100°C	25
Typical Junction Capacitance ¹	C _J	750	pF
Typical Thermal Resistance	R _{θJA}	12	°C / W
Operating and Storage Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 175	°C

Notes:

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

CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

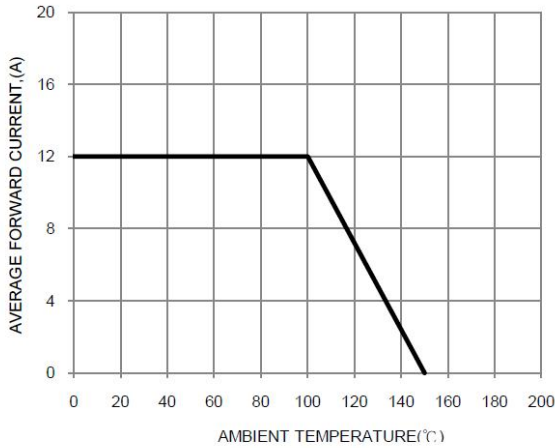


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

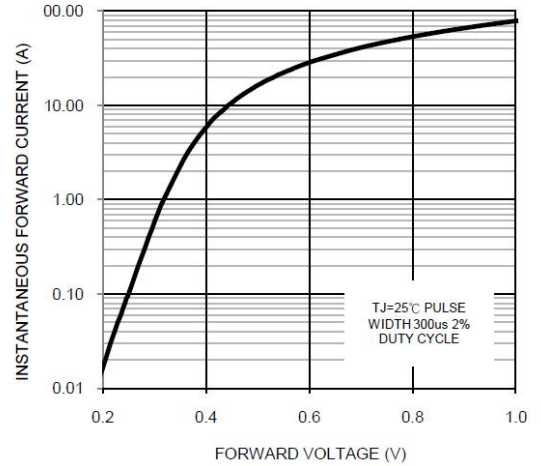


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

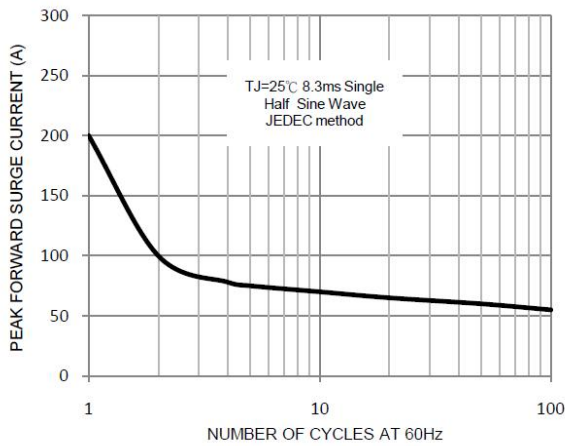


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

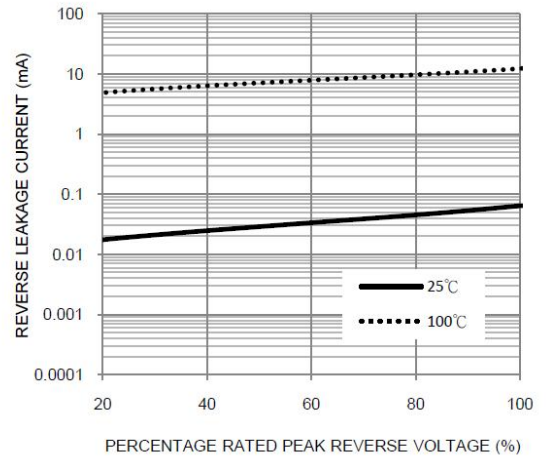


FIG. 5-TYPICAL JUNCTION CAPACITANCE

