Elektronische Bauelemente

MBR10100D

Voltage 100 V

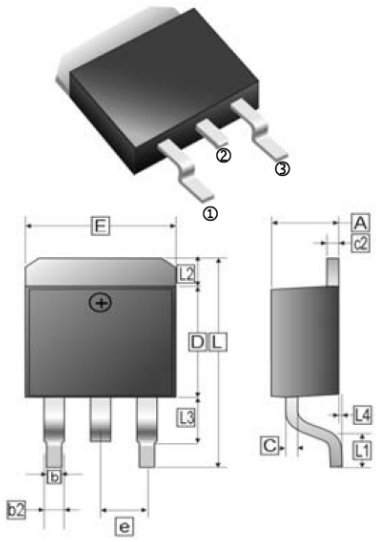
10 Amp Schottky Barrier Rectifiers

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

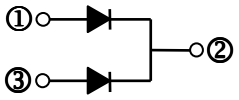
FEATURES

- Plastic package has underwriters laboratory Flammability classification 94V-0
  Flame retardant epoxy molding compound
- Low forward voltge, high current capability
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications

TO-263(D^2-Pack)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.00	4.87	c2	1.07	1.65
b	0.51	1.01	b2	1.34 REF	
L4	0.00	0.30	D	8.0	9.65
C	0.30	0.74	e	2.54 REF	
L3	1.50 REF		L	14.6	16.1
L1	2.5 REF		L2	1.27 REF	
E	9.60	10.67			



MECHANICAL DATA

- Case: TO-263(D^2-Pack) Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: As Marked
- Mounting position: Any

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-263	0.8K	13 inch

MAXIMUM RATINGS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

PARAMETER		SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Maximum RMS Voltage		V_{RMS}	70	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Current		I_F	10	A
Peak Forward Surge Current@8.3ms single half sine-wave superimposed on rated load(JEDEC method)		I_{FSM}	110	A
Maximum Forward Voltage @I_F=5A		V_F	0.85	V
Maximum DC Reverse Current Rated DC Blocking Voltage	T_J=25°C	I_R	0.02	mA
	T_J=100°C		20	
Typical Thermal Resistance from Junction to Case		$R_{\theta JC}$	3	°C/W
Operating & Storage Temperature		T_J ,T_{STG}	-55~150	°C

RATINGS AND CHARACTERISTIC CURVES

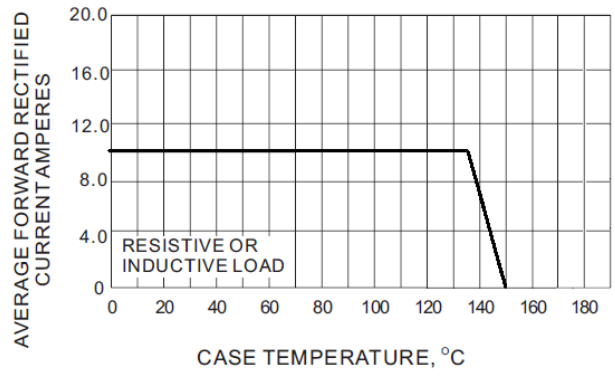


Fig.1- FORWARD CURRENT DERATING CURVE

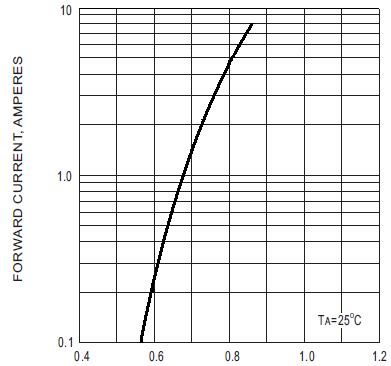


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

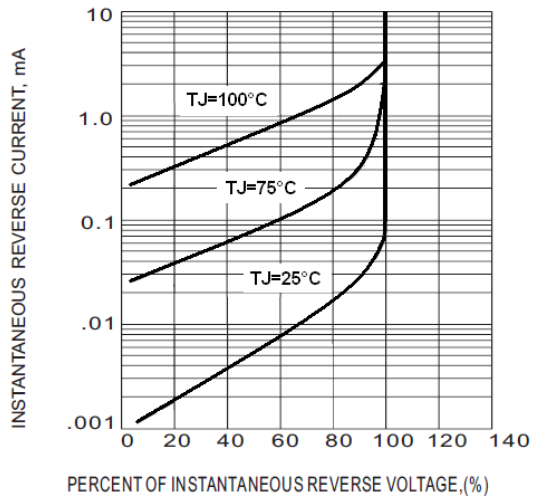


Fig.3- TYPICAL REVERSE CHARACTERISTICS

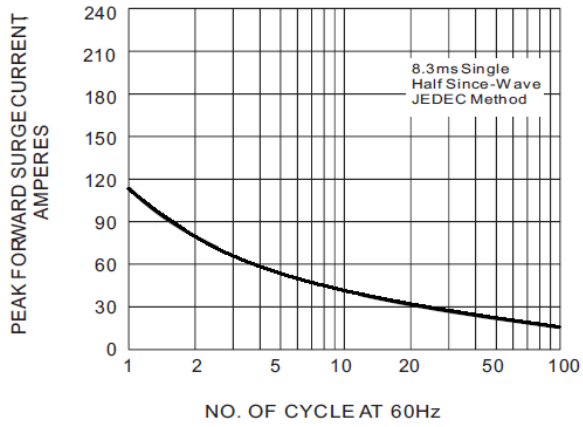


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT