

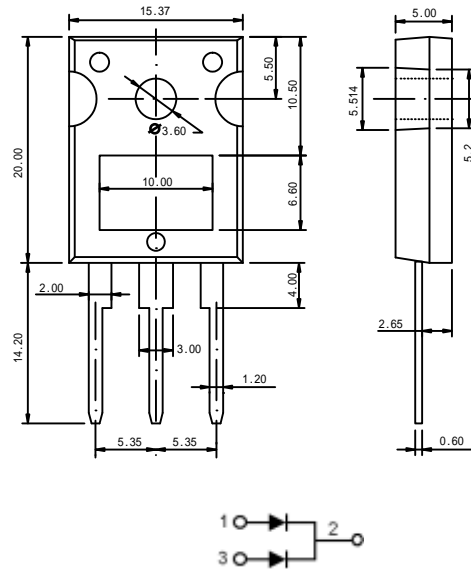
FEATURES

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0

MECHANICAL DATA

- Case : TO-3P molded plastic
- Polarity : As marked on the body
- Mounting position : Any

TO-3P PACKAGE



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60HZ, resistive or inductive load.
 For capacitive load, derate current by 20%



Lead Free

CHARACTERISTICS	SYMBOL	MBR30100PT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	V
Maximum RMS Voltage	VRMS	70	V
Maximum DC Blocking Voltage	Vcc	100	V
Maximum Average Forward Rectified Current	I(AV)	30	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	IFSM	250	A
Maximum Forward Voltage at 15A DC	VF	0.85	V
Maximum DC Reverse Current @TC=25°C at Rated DC Blocking Voltage @TC=125°C	IR	0.05 50	MA
Typical Thermal Resistance	ROJC	1.4	°C/W
Operating Temperature Range	TJ	-55to+175	°C
Storage Temperature Range	TSTG	-55to+175	°C

RATINGS AND CHARACTERISTIC CURVES

FIG-1 FORWARD CURRENT DERATING CURVE

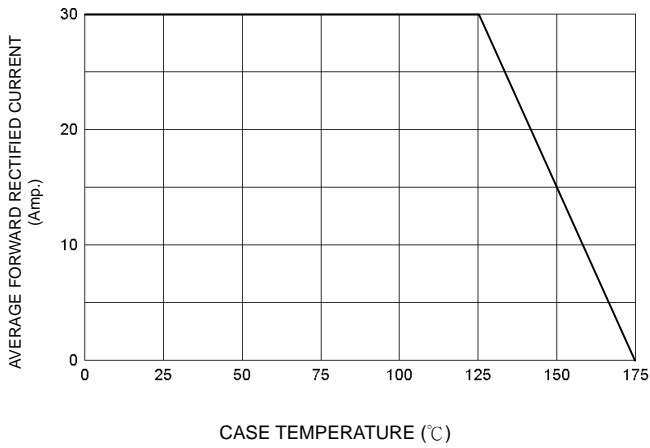


FIG-2 TYPICAL FORWARD CHARACTERISTICS

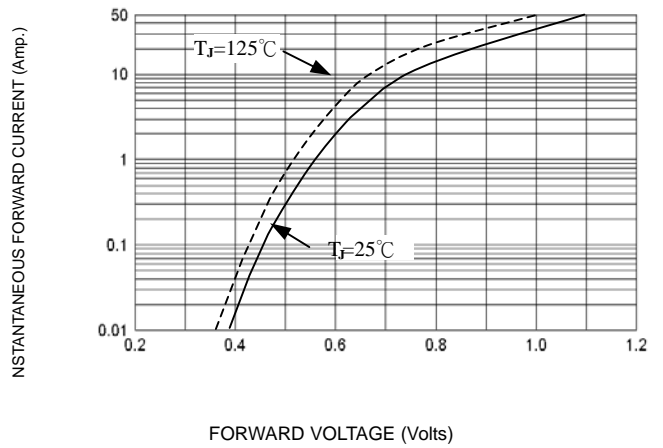


FIG-3 TYPICAL REVERSE CHARACTERISTICS

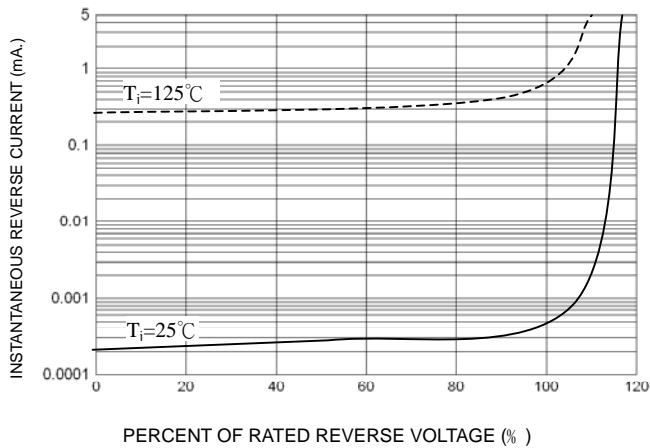


FIG-4 TYPICAL JUNCTION CAPACITANCE

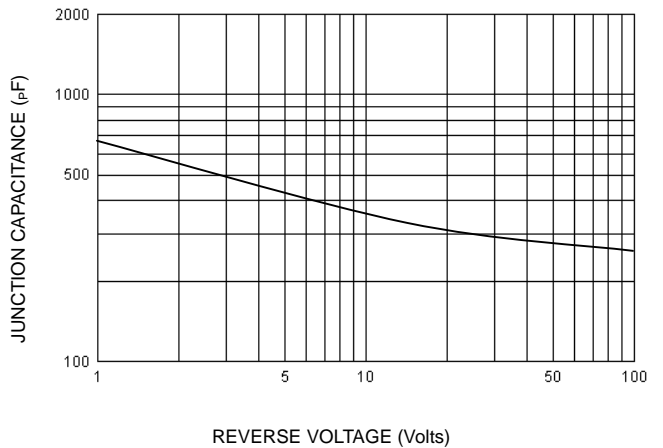


FIG-5 PEAK FORWARD SURGE CURRENT

