

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 15 Volts
FORWARD CURRENT - 25 Amperes

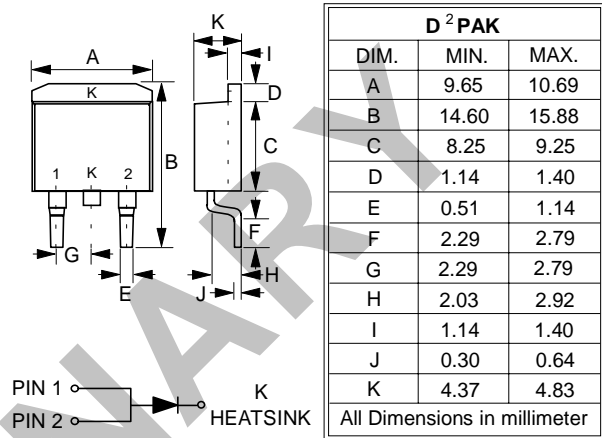
FEATURES

- 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
- For use in low voltage,high frequency inverters,free whelling,and polarity protection applications

MECHANICAL DATA

- Case : D²PAK molded plastic
- Polarity : As marked on the body
- Weight : 0.06 ounces, 1.7 grams

D²PAK



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%

CHARACTERISTICS	SYMBOL	MBRB2515L	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	15	V
Maximum RMS Voltage	VRMS	10.5	V
Maximum DC Blocking Voltage	VDC	15	V
Maximum Average Forward Rectified Current (See Fig.1) @Tc=90°C	I(AV)	25	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	IFSM	150	A
Voltage Rate of Change (Rated VR)	dv/dt	10000	V/us
Maximum Forward Voltage at (Note 1) @ IF=19A; TJ= 70°C @ IF=25A; TJ= 70°C @ IF=25A; TJ= 25°C	VF	0.28 0.42 0.45	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=100°C	IR	15 200	mA
Typical Thermal Resistance (Note 3)	RθJC	1.0	°C/W
Typical Junction Capacitance per element (Note 2)	CJ	1150	pF
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	TSTG	-55 to +150	°C

NOTES : 1. 300us Pulse Width, 2% Duty Cycle
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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FIG.1 - FORWARD CURRENT DERATING CURVE

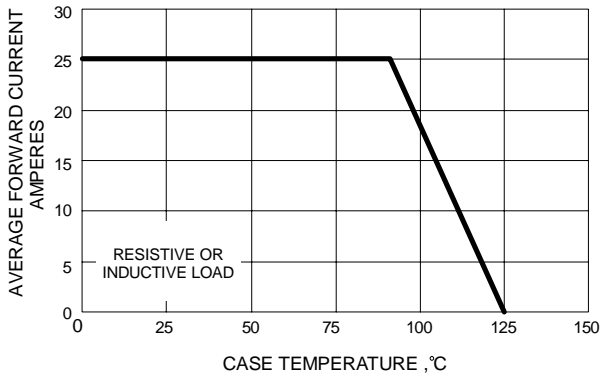


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

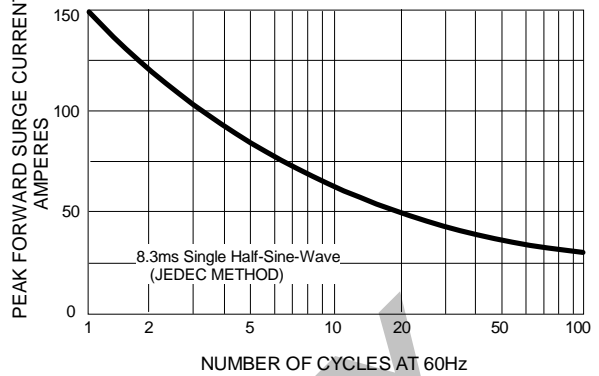


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

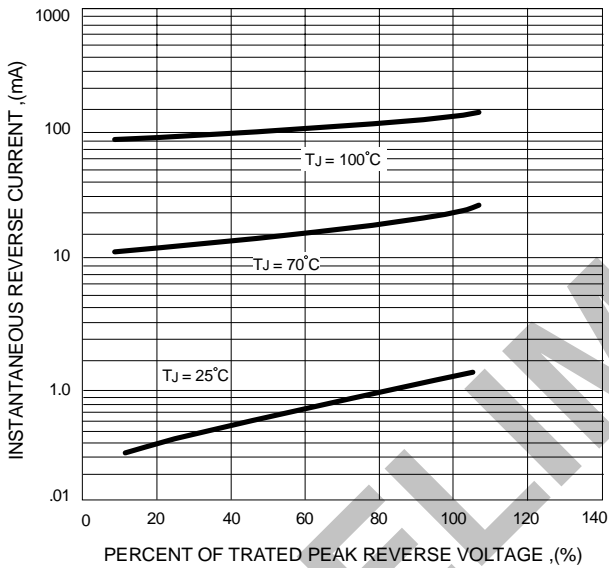


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

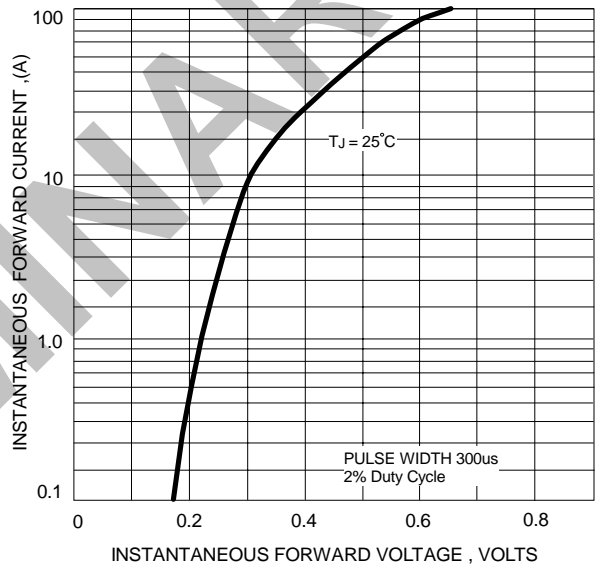


FIG.5 - TYPICAL JUNCTION CAPACITANCE

