

Pb Free Plating Product

MUR1620E/MUR1640E/MUR1660E



16 Ampere Heatsink Series Connection Fast Recovery Half Bridge Rectifiers

<p>Features</p> <ul style="list-style-type: none"> * Latest GPP technology with super fast recovery time * Low forward voltage drop * High current capability * Low reverse leakage current * High surge current capability <p>Application</p> <ul style="list-style-type: none"> * Automotive Inverters and Solar Inverters * Plating Power Supply, SMPS, Motor Control and UPS * Car Audio Amplifiers and Sound Device Systems 	<p>Mechanical Data</p> <ul style="list-style-type: none"> * Case: Heatsink TO-220AB/TO-220CE * Epoxy: UL 94V-0 rate flame retardant * Terminals: Solderable per MIL-STD-202 method 208 * Polarity: As marked on diode body * Mounting position: Any * Weight: 2.2 gram approximately 	<p>TO-220AB Unit:mm</p> <p>① ← ② → Case ③ → Series Tandem Polarity Suffix "E"</p>
---	---	--

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	MUR1620E	MUR1640E	MUR1660E	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	200	400	600	V
Maximum RMS Voltage	VRMS	140	280	420	V
Maximum DC Blocking Voltage	VDC	200	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	16.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	175	150		A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.98	1.3	1.7	V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR		5.0 100		uA uA
Maximum Reverse Recovery Time (Note 1)	Trr		35		nS
Typical junction Capacitance (Note 2)	CJ		90		pF
Typical Thermal Resistance (Note 3)	Rj/c		2.2		°C/W
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 150			°C

NOTES : (1) Reverse recovery test conditions IF= 0.5A, R= 1.0A, Irr = 0.25A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE



FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

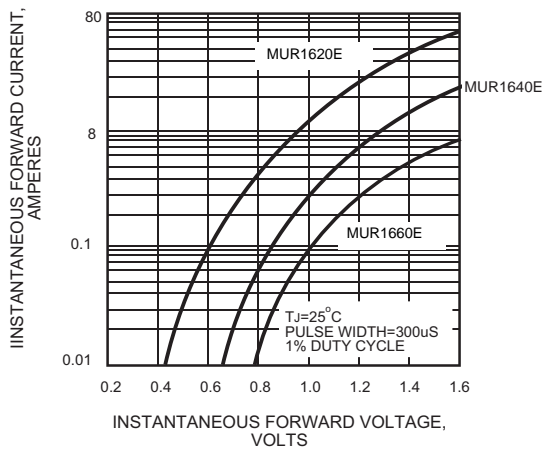


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



FIG.5 - TYPICAL JUNCTION CAPACITANCE

