

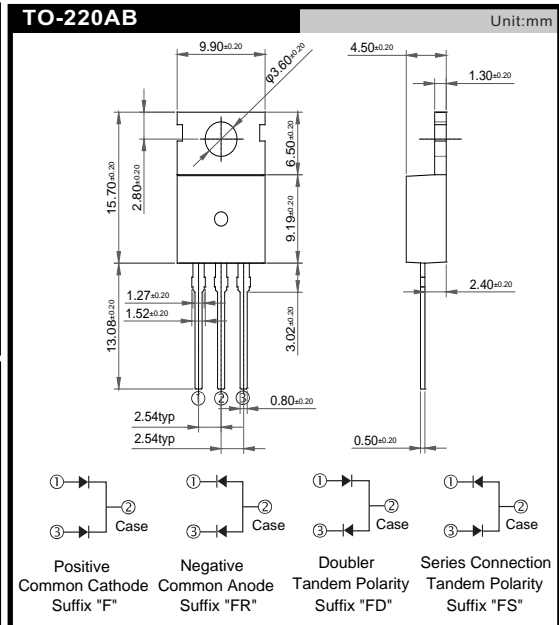
Pb Free Plating Product

## C10P20FS/C10P40FS/C10P60FS



10 Ampere Dual Tandem Polarity Ultra Fast Recovery Half Bridge Rectifiers

<p><b>Features</b></p> <ul style="list-style-type: none"> <li>* Latest GPP technology with super fast recovery time</li> <li>* Low forward voltage drop</li> <li>* High current capability</li> <li>* Low reverse leakage current</li> <li>* High surge current capability</li> </ul> <p><b>Application</b></p> <ul style="list-style-type: none"> <li>* Automotive Inverters and Solar Inverters</li> <li>* Plating Power Supply, SMPS, EPS and UPS</li> <li>* Car Audio Amplifiers and Sound Device Systems</li> </ul>
<p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>* Case: TO-220C heatsink package outline</li> <li>* Epoxy: UL 94V-0 rate flame retardant</li> <li>* Terminals: Solderable per MIL-STD-202 method 208</li> <li>* Polarity: As marked on diode body</li> <li>* Mounting position: Any</li> <li>* Weight: 2.0 gram approximately</li> </ul>



### 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	C10P20FS	C10P40FS	C10P60FS	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)	10.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	100			A
Maximum Instantaneous Forward Voltage @ 5.0 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			uA
		100			uA
Maximum Reverse Recovery Time (Note 1)	Trr	35			nS
Typical junction Capacitance (Note 2)	CJ	65			pF
Typical Thermal Resistance (Note 3)	RθJC	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, IR = 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

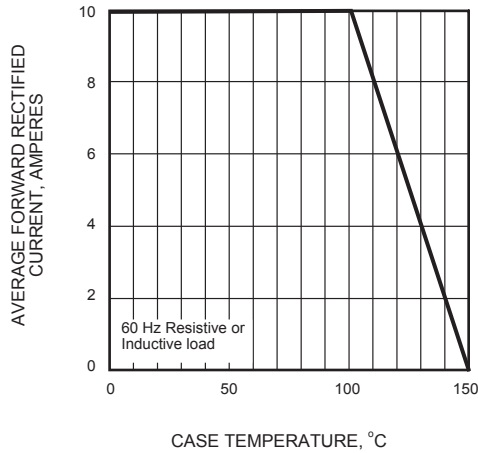


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

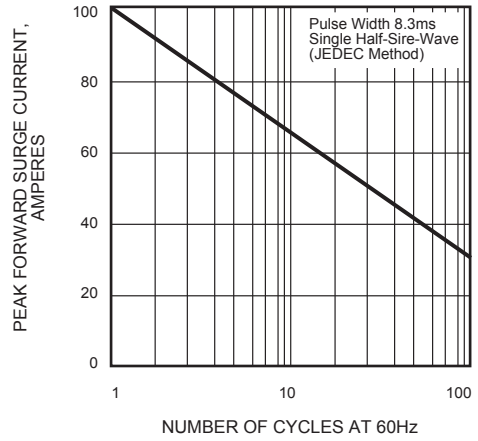


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

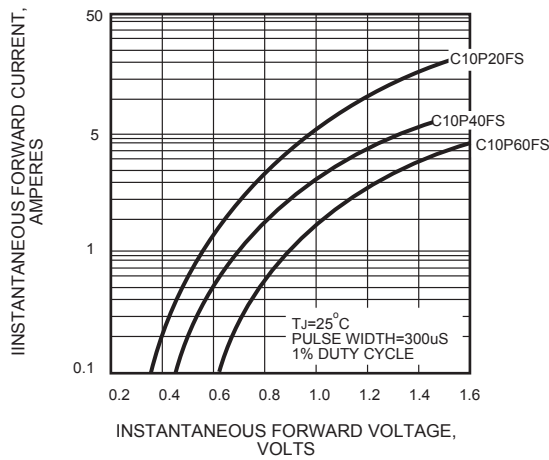


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

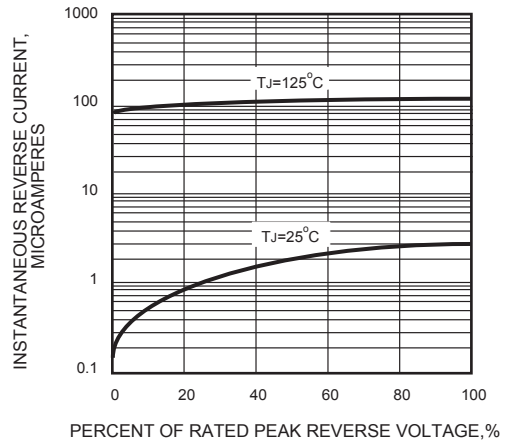


FIG.5 - TYPICAL JUNCTION CAPACITANCE

