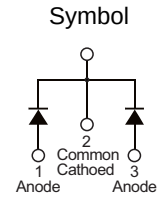


■ PRODUCT CHARACTERISTICS

VR(@IC=0.5mA)	400V
VF(Typ@IF=5A)	1.1V
IR(@VR=400V)	10uA
ID	10A
TRR	35nS

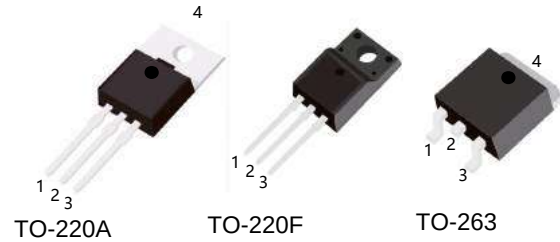


■ MECHANICAL CHARACTERISTICS

- * Case: epoxy,molded
- * Finish:all external surfaces corrosion resistant and terminal
- * Leads are readily solderable
- * Leads temperature for soldering purposes:
260°C Max for 10 seconds

■ FEATURES

- * Guard ring for stress protection
- * Low forward voltage
- * Low power loss/high efficiency
- * High surge capacity
- * Low stored charge majority carrier conduction
- * Pb free package are available



■ ORDER INFORMATION

Order codes		Package	Packing
Halogen-free	Halogen		
N/A	MUR1004A	TO-220	50pieces/Tube
N/A	MUR1004F	TO-220F	50pieces/Tube
N/A	MUR1004E	TO-263	800pieces/Reel

■ MAXIMUM RATINGS (Each diode leg)

Parameter		Symbol	Value	Unit
Peak repetitive reverse voltage		V_{RRM}	400	V
Average rectified output current	Total	I_o	10	A
	Per leg		5	A
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on reate load		I_{FSM}	150	A
Operating and storage temperature range		T_J, T_{STG}	-55 to + 175	°C

■ ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Peak repetitive reverse voltage	B_V	$I_C=0.5mA, T_J=25^{\circ}C$	400	-	-	V
Forward voltage drop	V_F	$I_F=5A, T_J=25^{\circ}C$	-	1.1	1.3	V
Leakage current	I_R	$V_R=400V, T_J=25^{\circ}C$	-	-	0.01	mA
		$V_R=400V, T_J=125^{\circ}C$	-	-	6	
Fast recovery diode reverse recovery time	T_{RR}	Recovery time $I_F=1A, dI_F/dt=200A/\mu s$	-	-	35	nS

■ TYPICAL CHARACTERISTICS

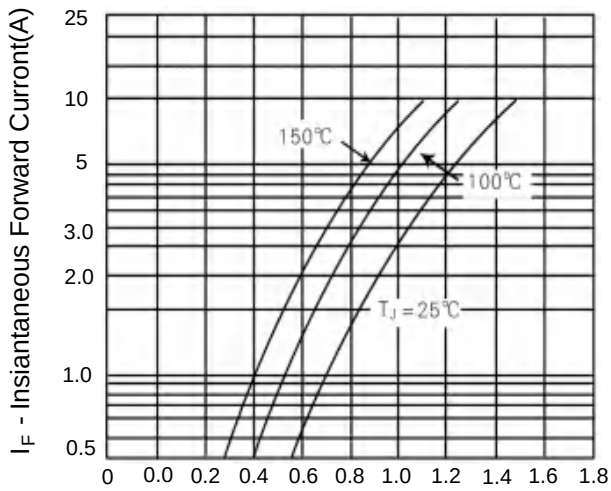


Figure 1. Typical Forward Voltage Per Diode

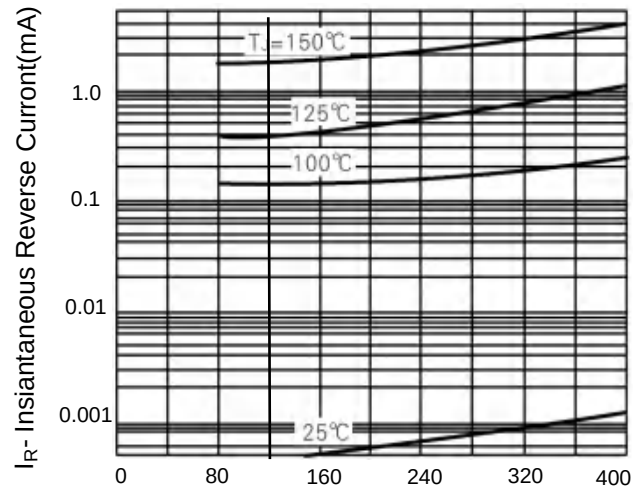


Figure 2. Typical Reverse Current Per Diode

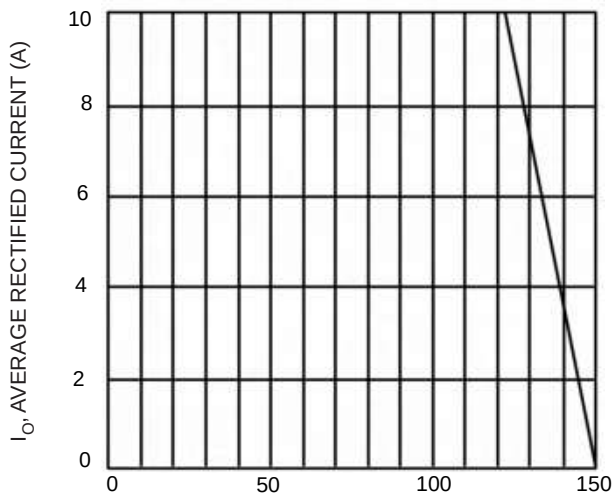


FIGURE.3 Forward Current Derating Curve

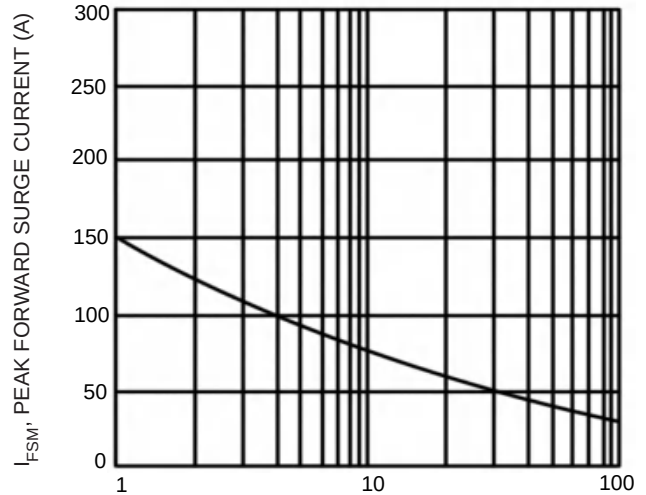


FIGURE.4 Max Non-Repetitive Surge Current

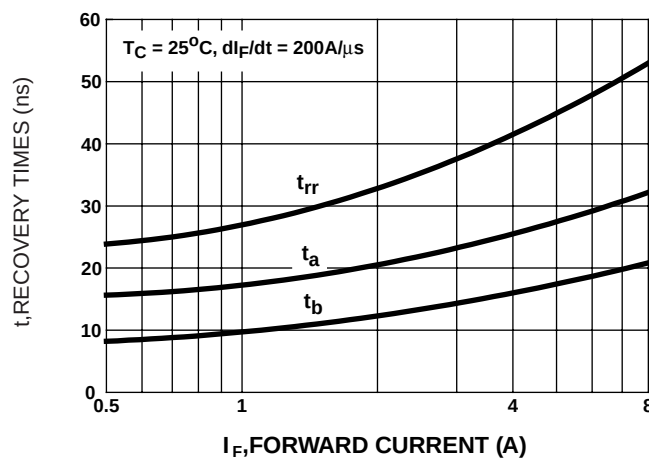
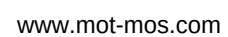
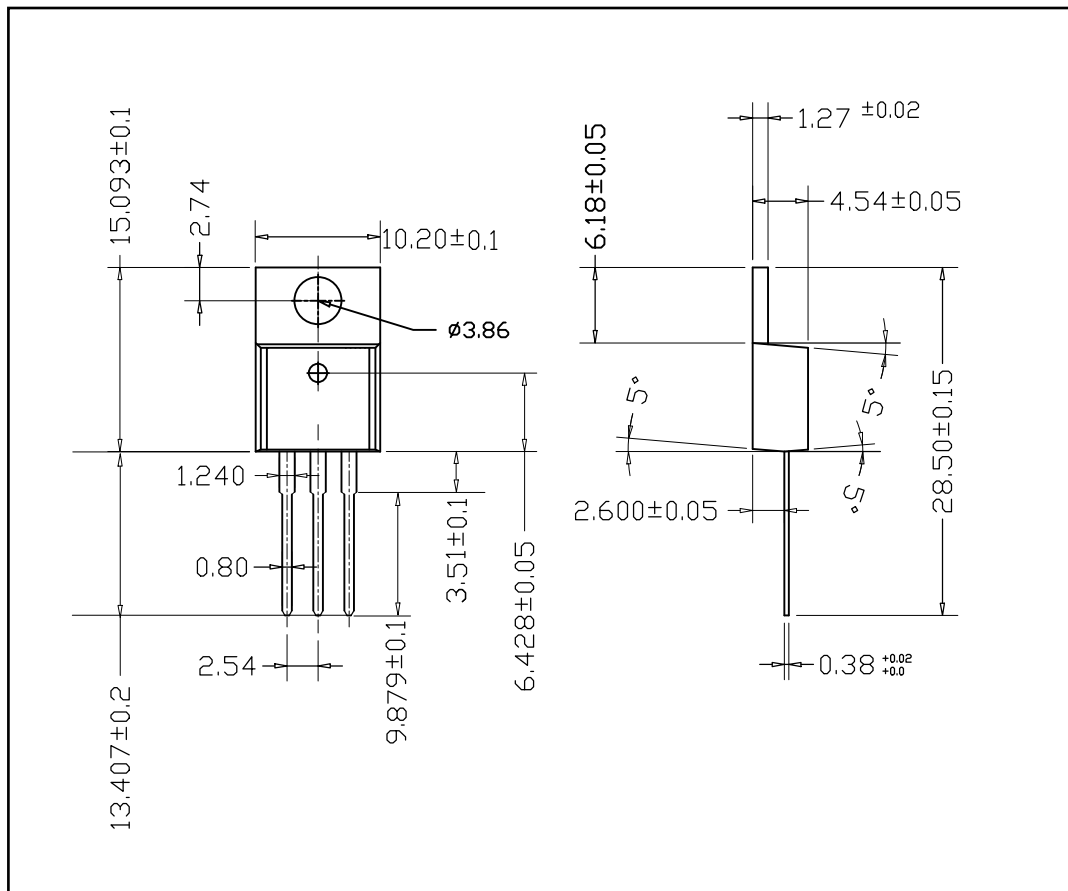


FIGURE.5 t_{rr} , t_a AND t_b CURVES vs FORWARD CURRENT

10A FAST RECOVERY DIODE



■ TO-220 PACKAGE OUTLINE DIMENSIONS



■ TO-263 PACKAGE OUTLINE DIMENSIONS

