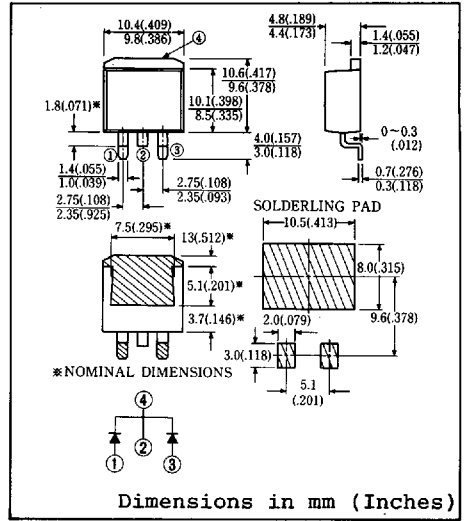


**SQUARE-PAK**

**FEATURES**

- Similar to TO-263AB Case, Surface Mount Device
- Dual Diodes - Cathode Common
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 20 Volts thru 100 Volts Types Available
- Packaged in 24mm Tape and Reel



Approx. Net Weight : 1.4 Grams

**MAXIMUM RATINGS**

Voltage Rating	TYPE	◆ C25T05Q	C25T06Q	Unit	
	Symbol				
Repetitive Peak Reverse Voltage	$V_{RRM}$	50	60	V	
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	55	65	V	
Electrical Rating	Symbol	Condition		Rating	Unit
Average Rectified Output Current	$I_O$	Full rectangular wave conduction $T_C = 81^\circ C$		27.7	A
		Full sinusoidal wave conduction $T_C = 91^\circ C$		25	
RMS Forward Current	$I_{F(RMS)}$			28	A
Peak One-cycle Forward Surge Current	$I_{FSM}$	50Hz full sine wave, non-repetitive		150	A
Operating Junction Temperature Range	$T_{jw}$			-40 to 125	$^\circ C$
Storage Temperature Range	$T_{stg}$			-40 to 125	$^\circ C$

**ELECTRICAL & THERMAL CHARACTERISTICS**

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 12.5A$ $T_j = 25^\circ C$ per diode leg	0.62	V
Peak Reverse Current	$I_{RM}$	$V_{RM} = V_{RRM}$ $T_j = 25^\circ C$ per diode leg	15	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	1.5	$^\circ C/W$

◆ For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

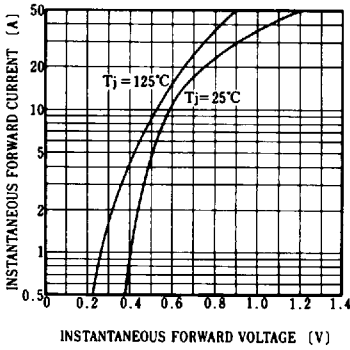


FIG.2-AVERAGE FORWARD POWER DISSIPATION

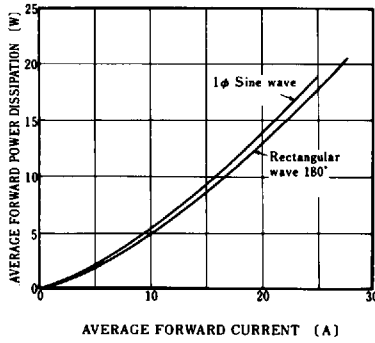


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

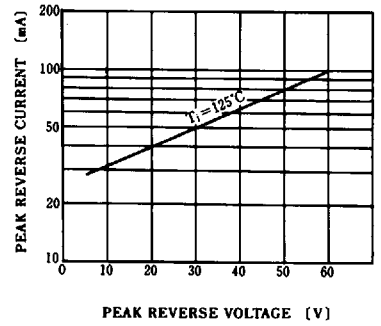


FIG.4-AVERAGE REVERSE POWER DISSIPATION

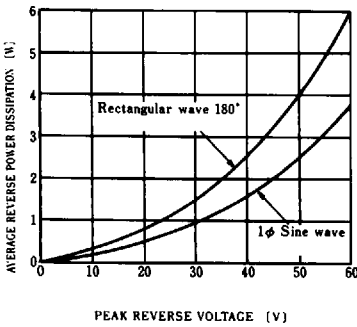


FIG.5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

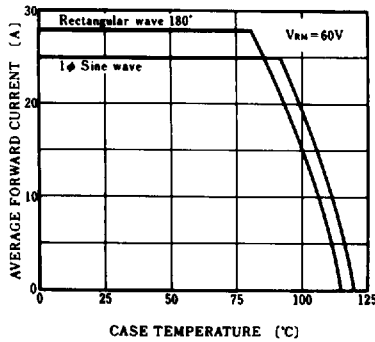


FIG.6-SURGE CURRENT RATINGS

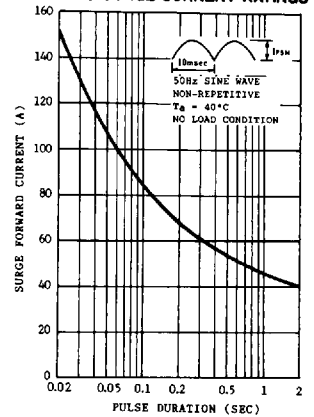


FIG.7-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

