

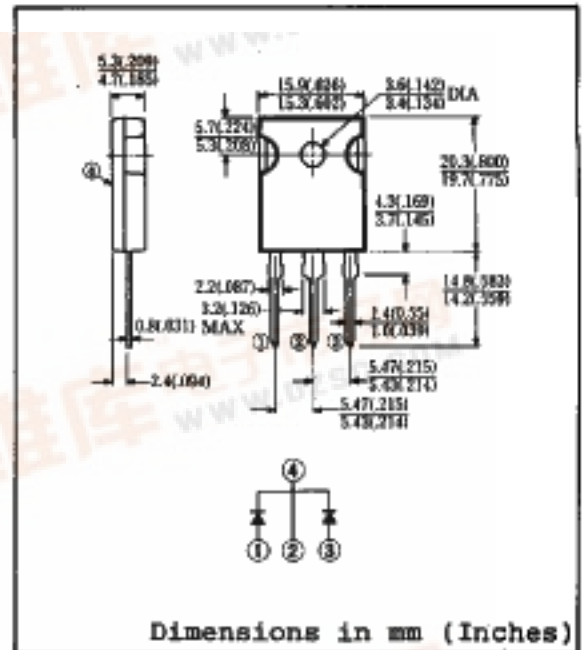
SCHOTTKY BARRIER DIODE

27.7A/50~60V

C25P05Q C25P06Q

FEATURES

- Similar to TO-247AC (TO-3P) Case
- Dual Diodes - Cathode Common
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 20 Volts thru 100 Volts Types Available



Approx. Net Weight : 5.55 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE	+ C25P05Q	C25P06Q	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		200	A
Operating Junction Temperature Range	T_{jw}			-40 to 125	$^\circ C$
Storage Temperature Range	T_{stg}			-40 to 125	$^\circ C$
Mounting Torque	F_{tor}	Recommended torque		0.5 (5.1)	N·m (kgf·cm)

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

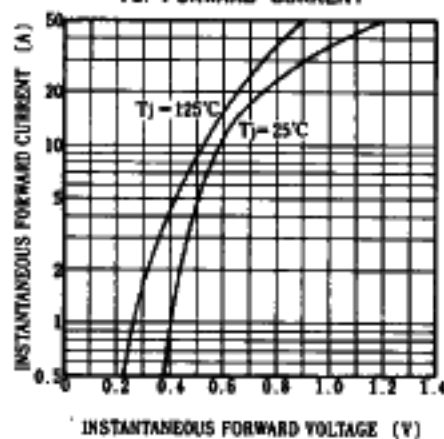


FIG.2-AVERAGE FORWARD POWER DISSIPATION

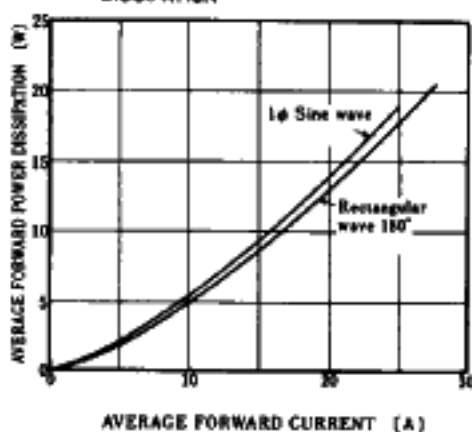


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

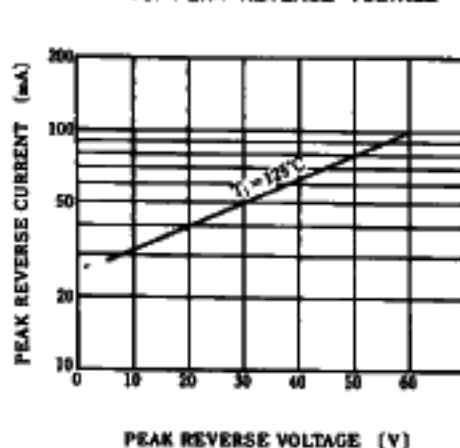


FIG.4-AVERAGE REVERSE POWER DISSIPATION

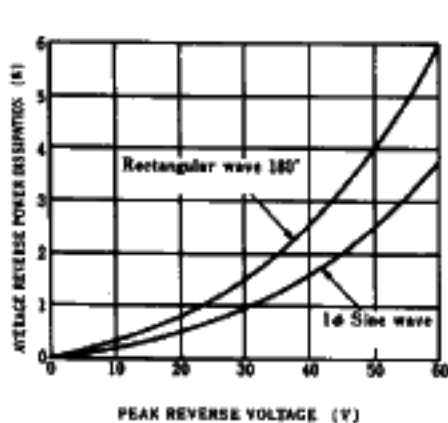


FIG.5-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

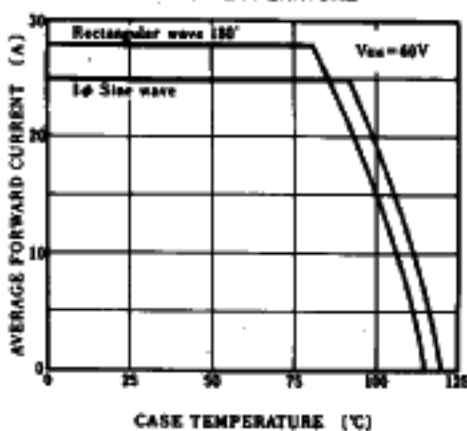


FIG.6-SURGE CURRENT RATINGS

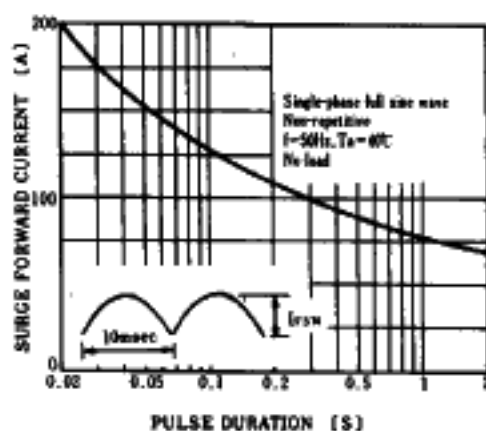


FIG.7-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

